

GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
Gettysburg Vicinity
Adams County
Pennsylvania

HAER NO. PA-485

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HISTORIC AMERICAN ENGINEERING RECORD

GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS

HAER NO. PA-485

LOCATION:

Gettysburg National Military Park's interpretive road system encompasses public roads, avenues, and farm lanes which service both the local community of Gettysburg and visitors to the 5,733-acre park. The avenue system extends throughout the battlefield, mostly through National Park Service property and partly on right-of-ways, while the public roads, which played a vital role in the July 1863 Battle of Gettysburg, intersect and connect the scattered sections of park avenues. All of the interpretive roads and avenues are within Adams County, Pennsylvania.

UTM Zone 18 Coordinate Bounding Boxes for Gettysburg National Military Park:¹

Main Field

Northwest Corner:	X = 304,500; Y = 4,414,500
Northeast Corner:	X = 311,500; Y = 4,414,500
Southwest Corner:	X = 304,500; Y = 4,405,000
Southeast Corner:	X = 311,500; Y = 4,405,000

East Cavalry Field

Northwest Corner:	X = 313,000; Y = 4,412,500
Northeast Corner:	X = 315,500; Y = 4,412,500
Southwest Corner:	X = 313,000; Y = 4,409,000
Southeast Corner:	X = 315,500; Y = 4,409,000

DATES OF

CONSTRUCTION:

1883-1917; 1933-1940; 1956-1959

TYPES OF

¹UTM information compiled by Curt Musselman, Resource Management Division, Gettysburg National Military Park (GNMP).

GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
HAER No. PA-485
(Page 2)

STRUCTURES: Vehicular Roads, Bridges, and Drainage Features

DESIGNER/ENGINEER: The earliest roads constructed as part of a system of interpretive roads in what is now the Gettysburg National Military Park were designed and laid out by the Gettysburg Battlefield Memorial Association (1864-1895), a private organization of veterans and local citizens which endeavored to commemorate the Gettysburg battlefield with memorials and avenues along the Army of the Potomac's lines of battle. As of 1895 the War Department officially took over the administration and operation of the battlefield, assigning a trio of veterans from the battle to the Gettysburg Battlefield Commission to oversee the marking of the battle lines for both the Union and Confederate Armies. The commission selected as head engineer Colonel Emmor B. Cope, a Gettysburg veteran who had worked as a topographical engineer under General G. K. Warren. His responsibilities included the layout and design of the avenues, water systems, and any structures necessary for the construction and operation of the park. When the National Park System took over the management of Gettysburg in 1933, the Eastern Division, Branch of Plans and Design, National Park Service, and the United States Department of Agriculture, Bureau of Public Roads took over the design and engineering of the park avenues and their accompanying features.

PREVIOUS OWNERS: Gettysburg Battlefield Memorial Association, 1863-1895
U. S. Department of War, 1895-1933

PRESENT OWNER: National Park Service

SIGNIFICANCE: Constructed between 1882 and 1917, the avenues of the Gettysburg National Military Park serve as the main interpretive system for the three days of battle which took place

between the Army of the Potomac and the Army of Northern Virginia on 1, 2, and 3 July 1863, as a part of the American Civil War. The park was authorized as a National Military Park by the federal government in 1895 to represent the significant engagements in the East, one of five major battlefields to commemorate the Civil War. The battlefield has been under the control of three successive organizations, the Gettysburg Battlefield Memorial Association (1864-1895), the War Department (1895-1933), and the National Park Service (1933-present), all of which have altered, added to and maintained the avenue system. For the most part the avenues were constructed along the battle lines of the Union and Confederate Armies to show those armies' defensive positions prior to each day's fighting.

The War Department laid out and improved the greatest number of avenues, most using the Telford method of road construction. In the early twentieth century the Telford avenues of Gettysburg were recognized as some of the finest roads in the country. The avenues are significant because they combined an awareness of advanced road-building technology with a sensitivity to the landscape on which they were constructed. This Telford construction survives as the solid base for many of the avenues in the park today, so while they are hidden, they continue to serve as material evidence of historic road building and of the veterans' vision of how they wanted their war efforts and comrades to be remembered. The early interpretive road system for the park combined the existing system of public roads, farm lanes and other historic traces with avenues laid out across the valley wherever the lines of battle formed. Tracing the development of this road system becomes a journey into the park's evolving interpretation of the Battle of Gettysburg

GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
HAER No. PA-485
(Page 4)

and how the entire landscape is integral to that interpretation.

PROJECT HISTORIAN: Amanda J. Holmes, HAER 1998

PROJECT
INFORMATION:

This project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the Historic American Buildings Survey/Historic American Engineering Record Division (HABS/HAER) of the National Park Service, U.S. Department of the Interior. Gettysburg National Military Park (GETT) Tour Roads Recording Project was cosponsored during the summer of 1998 by HAER (Eric Delony, Chief) and GETT (John Latschar, Superintendent). The project was funded by the Federal Lands Highway Program (Allen Burden, Acting Administrator) through the National Park Service Roads and Parkways Program (Mark Hartsoe, Manager).

The field work, measured drawings, historical reports, and photographs were prepared under the directions of Program Manager Todd Croteau, Project Leader Christopher Marston, and Program Historian Tim Davis. The recording team consisted of Edward Lupyak, field supervisor, landscape architects Nicole Steel, Nicki Yung, and Christiane Weber (ICOMOS Intern, Germany). Historical reports were prepared by project historian Amanda Holmes. Formal large-format photography was done by David Haas.

TABLE OF CONTENTS

INTRODUCTION.....	6
ROAD TYPES.....	10
HISTORY	
A Convergence of Roads.....	15
The Battle of Gettysburg	
Prelude to the Battle.....	20
July 1.....	24
July 2.....	26
July 3.....	28
Aftermath.....	30
National Cemetery.....	31
THE GETTYSBURG BATTLEFIELD MEMORIAL ASSOCIATION.....	38
THE WAR DEPARTMENT (1893-1933).....	82
PRESERVING THE FIELD AND AVENUE CONSTRUCTION.....	92
CONCLUSION.....	132
APPENDIX A Commissioners and Superintendents.....	134
APPENDIX B Avenue Details.....	136
APPENDIX C Local Roads.....	210
APPENDIX D Farm Lanes.....	212
SOURCES CONSULTED.....	214

Introduction:

Gettysburg National Military Park is located in Adams County, Pennsylvania, eight miles north of the Maryland state border. The town of Gettysburg, which is encompassed within the present park boundary and was central to the July 1863 battle, lies in a valley known as the Gettysburg Basin. Throughout the Gettysburg Battlefield area the geological features and landmarks which shaped the battle have also shaped the park. From the gentle ridgeland near Gettysburg one can see the Blue Ridge Mountains and South Mountain to the southwest and west, through which much of Robert E. Lee's Army of Northern Virginia advanced and retreated. The mountains form a distinct line as they rise out of the valley that defines the land to the north and south. In contrast to these dramatic geographical features, the land east of Gettysburg is a more subtle landscape, with public roads passing through small towns, rich farmland and low hills, with the exception of Culp's Hill and the Round Tops.

The land directly around Gettysburg combines fertile farmland and areas of rocky soil and boulder outcrops. Several small creeks and runs likewise appear across the valley. Most of these waterways are now diverted into more channeled paths under bridges and through culverts and do not function significantly in the presentation and interpretation of the park. In a battlefield that the veterans remembered for its swamps, marshes and mud, few traces of such a landscape survive amidst the avenue system. Rock Creek, which runs east of Gettysburg and is the largest of the waterways in the immediate vicinity, seems to pass unnoticed through the park, surrounded by old farmlands now overgrown with woods. This waterway feeds into the Monocacy River shortly before reaching the Maryland border. Only about a mile of Willoughby Run, another significant battlefield waterway, is within the park-owned land. West of Gettysburg, it too remains largely uninterpreted, set apart from features of the park popular with visitors today.

Overall, the park is a blend of open, rocky pasture, intensely farmed acreage, and heavily wooded areas, some dense with fallen timber and undergrowth while others are tended, open woodlots. The rocky promontories of the Round Tops clearly dominate the surroundings. Some of the open lands reflect the historic character of small Civil War-era farms among woodlots, while others extend nearly uninterrupted for a mile, such as the

expanse east and west across the scene of the Confederate advance to the Union position on Cemetery Ridge. Throughout and integral to all of these landscapes are the ever-present avenues, monuments and tablets, reminding visitors of the layers of interpretation which have been added to the battlefield in the last 135 years.

The interpretive tour roads traverse Gettysburg's diverse landscape. From the time that the park was created in the months after the battle to its inception as a National Battlefield Park in the 1890s and into the present, roads have been integral to visitors' interpretation of the battle and the use of the park. The roads, which within the park are more commonly known as avenues, lead visitors to significant points of battle. These points have been marked by the veteran organizations with numerous monuments and tablets in order to inform visitors of troop movements and numbers. Subsequent administrations at the park have added various forms of wayside exhibits and directional signage, but the monumented landscape and most of the avenue alignments have remained consistent.

Unlike other military parks that are either in remote areas or in areas so populated that much of the field has been swallowed by urban sprawl, Gettysburg has retained a relatively light population density. While relatively rural in its overall character, keeping Gettysburg looking rural has been challenge. The town and region is accessible within one hour from Baltimore, Washington, D.C., and Harrisburg, and just over two hours from Philadelphia. The town itself has preservation laws to protect the Civil War character of its core buildings, but some of the areas that surround Gettysburg combine older farm houses with upper-income and modest houses built on subdivided lots and sprawling retail chains. Since World War I the pressure on land surrounding the park and within the town has threatened the balance between park preservation and town interests for economic expansion. As a result, several of the public roads leading in and out of Gettysburg are now lined with gas stations, hotels and motels, fast food chains, private museums, public entertainment, and souvenir shops. Gettysburg epitomizes the struggle between making a sacred landscape available to the public and providing

the goods and services which seem destined to follow tourist interests and a growing community.²

Although the National Park Service posts signs announcing the park's open hours from 6:00 a.m. to 10:00 p.m., few sections of the Gettysburg avenues and roads are actually gated, allowing public access twenty-four hours a day. Because of the ten public roads radiating from Gettysburg and the way that the park avenues intersect with these roads, there are approximately twenty-five ways to enter the park. As one approaches Gettysburg along Route 15, whether from the north or the south, road signs announce no fewer than six exits for the Gettysburg vicinity. The main entrance to the Visitor Center is off the Emmitsburg Road (also part of Business Route 15), so most visitors are encouraged to follow this route. When approaching the park from other directions, the park simply appears rather than being announced. For example, from the west along Chambersburg Pike and Mummasburg Road, as soon as one encounters monuments and uninterrupted fields one knows, without signs, that one has arrived at Gettysburg. The entire network of major roads in and around Gettysburg seems to preserve the nineteenth-century flavor of the transportation system, except for minor adjustments in alignments. Only a few of the avenues within the park actually follow old road traces, but they add another historical layer to the region's road system with their reflection of the Gettysburg battle lines. Some of the complex network of smaller eighteenth and nineteenth-century lanes and paths, however, has been submerged throughout much of the region and in the park.³ Roads that do not reflect either the battle or earlier road traces tend to be in the more recent suburban developments, including those that have crept into areas known to have played a significant role in the battle.

² George Boge and Margie Holder Boge, *Paving Over the Past: A History and Guide to Civil War Battlefield Preservation* (Washington D.C.: Island Press, 1993); Ary J. Lamme III, *America's Historic Landscapes: Community Power and the Preservation of Four National Historic Sites* (Knoxville: The University of Tennessee Press, 1989).

³For a list of the public roads and farm lanes still in use, please see the appendix section of this report.

Developing the Gettysburg battlefield commemorative landscape has been an evolving process. The initial creation of the park, which commemorated the three day battle and those who fought in it, took decades to evolve from its conception into a fully integrated planned landscape of avenues and monuments. The development of the park reveals the complexity of the act of its creation and its subsequent role in the lives of the veterans as they sought to secure meaning from their experiences and from the memory of war. At each stage of its development conflicts have arisen over land acquisition, the tone to adopt in the interpretation, and the placement of monuments and avenues. Each generation, likewise, has interpreted what it feels is the "battlefield landscape of 1863" and has made "authenticity" central to its development and management plan. The various administrations of the park sought to preserve and recreate the battlefield according to contemporary standards of park design and interpretations of what a battlefield park should be. This preservation inevitably involved contradictions and compromises, both as the legacy passed from one administrative body to the next and within each period of development. The only thing that seems to have gone undisputed is the importance of the battlefield itself, and that it should be preserved in one form or another.

When the Gettysburg Battlefield Memorial Association decided that the battlefield should be preserved as a way of memorializing the dead, the Civil War was still in recent memory. By the time the Gettysburg National Park Commission took over the operation and development of the park, the tangible signs of war on the land had become fading scars, which they hoped to keep from disappearing altogether. The commissioners' purpose was to carefully determine the Union and Confederate lines of battle and open them with fine avenues. The maintenance of the 1863 landscape was of secondary importance. The commission saw no conflict between the idea of preserving the battlefield landscape while at the same time creating a commemorative interpretation of the battle. This report will focus upon the formative years of the Gettysburg National Military Park and its interpretive avenue system, the Gettysburg Battlefield Memorial Association, and the Gettysburg National Park Commission. These years are vital to understanding the park and all that remains of its early avenue system. This report does not address the role of the National Park Service (NPS) after it assumed control in 1933. The NPS has played an important role, however, in the history of the park and

further study should be done of the NPS period, from 1933 to the present.

Gettysburg's avenues are complex artifacts which are central to the interpretation of the battle of Gettysburg and the appearance of the park. On a practical level, the avenues allow public access to the battlefield. On a more symbolic level, while some of the avenues follow sections of historic traces, others embody the narrative of the three-day battle that veterans of the battle chose to tell. Anyone who visits the park today has the potential to experience the battlefield on both the practical and symbolic levels, bringing whatever personal meaning the battle may have to their interpretation of the landscape and the events that took place there.

Road Types:

The roads that intersect and traverse through Gettysburg National Military Park fall into five categories, including U.S. and state highways, provincial (local) roads, park avenues, farm lanes, and avenues which have been abandoned or are inaccessible by car. Because of the way that the auto tour route and most of the park roads connect with public roads in their journeys across park land, speed limit and directional signs appear frequently to remind drivers when they have entered the park. Speed limit signs also appear on the straight stretches of avenues that seem to invite increased speed. The avenues designate 25 mile per hour speeds throughout most of the park. There are several sharp curves, however, that require caution and slower speeds, although they are not labeled as such. Gettysburg's official park brochure is mindful of the variety of challenges that face drivers as they try to take in the park sites along the sides of the roads while their feet are on the gas pedal. "Use extreme caution driving the park roads," warns the brochure, "especially where they intersect with heavily traveled highways."⁴ The unpredictable appearances of one and two-way avenues can cause concern to drivers. The auto tour brochure alerts drivers to the direction the tour takes, but does not designate if avenues are one or two-way. Some of the avenues that begin as two-way switch

⁴ U.S. Department of the Interior, National Park Service, *Gettysburg National Military Park, Official Map and Guide* (Washington, D.C.: Government Printing Office, 1997), 2. For details on the current conditions of the avenues, please see the appendix "Avenue Details" at the end of this report.

unexpectedly to one-way, usually to accommodate local residents. For drivers wanting to stop at various sites, the general rule is to park on the right side of the road and drive on the left, at least on one-way roads. The confusion wrought by the varied road uses results in a proliferation of signs informing drivers of the particulars of each road.

The continued significance of four of the roads that were historically important to the commerce of Gettysburg and during the Battle of Gettysburg is reflected in their designation as U.S. highways. The Chambersburg and York Pikes are now known as the east-west U.S. Route 30, and the north-south oriented Emmitsburg and Harrisburg Roads are currently designated as Business U.S. Route 15. These highways offer the most direct routes for travelers heading in the four directions of the compass, beyond merely linking Gettysburg to neighboring communities. Those traveling north-south who wish to avoid Gettysburg altogether take U.S. Route 15, which bypasses Gettysburg about 2 miles east of the town center. Those traveling east-west and having business anywhere in the region, however, cannot avoid entering Gettysburg and its busy town square. Most Gettysburg locals avoid the square, taking any number of back alleys and side roads to bypass the congestion. The only other viable quick east-west routes are the Pennsylvania Turnpike (Interstate 76), 30 miles north, and Interstate 70, accessible 40 miles south at Frederick, Maryland. The construction of U.S. Route 15 caused controversy in the community because business owners feared that travelers would bypass the town, thus straining their livelihoods.⁵ Proposed plans for a Business Route 30 north of town first began to circulate in the 1960s; the park even bought property for a new visitor center north of town to take advantage of the potential flow of traffic as it exited the bypass towards Gettysburg.⁶

⁵ "Widespread 'Economic Effects' of Route 15 Bypass Indicated at Highway Hearing Here; Will Affect Many Individuals, Businesses," *Gettysburg Times*, 4 August 1960, Gettysburg Newspaper Clippings, vol. 10, part 3, in Gettysburg National Military Park - Archives (hereafter cited as GNMP - Archives).

⁶ In the 1940s the park first considered placing a visitor center north of town at the same time as it considered other locations, including where the Cyclorama now stands. Drafts of the Master Plan in the 1970s made similar proposals and also

The distinction between the state and federal roads in and around Gettysburg is minimal. All of the roads, as they approach the town, respond to the physical limitations of the borough itself, particularly to the narrow residential and business district streets. Because the roads must adhere to state and federal highway standards, the width, shoulders, ditches, pavement markings, and other highway features do not necessarily reflect park interests in design. The highways' purposes are to convey travelers through the area at the drivers' greatest convenience and safety. Therefore signs, traffic lights, and turning lanes appear wherever they have been deemed necessary to facilitate the flow of traffic. Despite the purpose of state and federal roads being to move commercial, tourist and local traffic into and through town, all except Route 30 heading east (York Pike) at least partially border park land, thereby offering monumental vistas and a preserve of green and open space. The Emmitsburg and Taneytown Roads have made the greatest concessions to their locations within the heart of the park and as the routes that merge to flank the Visitor Center. Along a nearly 2 mile stretch of the Emmitsburg Road the variety of historic fence types, the farmsteads that witnessed the battle, the vistas, monuments, and parking pull-offs unmistakably announce that one has entered a national park. Although the posted speed limit is 25 miles per hour, traffic tends to flow faster, with those trying to pass through the area quickly being slowed by those intent on viewing the scenery at leisure.

Local roads are those roads that pass through or are used by the park but that the park does not necessarily control. Three main thoroughfares which are vital to people who live in the community are Granite Schoolhouse Lane, Wheatfield Road, and Millerstown Road. All of these roads are part of east-west oriented historic traces. The right-of-way to the north of Granite Schoolhouse Lane is controlled by the National Park Service, but the right-of-way to the south is only controlled by a scenic easement. Granite Schoolhouse Lane is a narrow roadway that some propose widening to ease two-way traffic, yet others protest would destroy its country lane characteristics, particularly because trees come up to the edge of the road in several places and create a canopy overhead nearly the entire length. The lane provides one of the few connections between the Baltimore Pike

incorporated drawings of access roads from the bypass, should it come to fruition.

and Taneytown Road and is a favorite access route for those familiar with the roads in the area.

Recently repaved, Wheatfield Road has already been altered to meet new road standards. The road passes directly through the park and intersects with battlefield avenues six times, more than any other road in the park. The rehabilitation project compromised some of the road's park-road features for public highway characteristics, particularly at its east end. White rip-rap now fills a ditch down the hill leading to the Valley of Death and cement curbing follows the curb on the north side of the road, a marked difference from the smooth edges of the park avenues. Particularly startling are the pavement markings, warning signs, and the large black and gold striped reflector signs mounted on the headwalls of the War Department era bridge that warn drivers of the narrowness of this structure. The sudden barrage of warnings arouses conflicting expectations that perhaps the bridge is more of a road hazard than a historic landscape feature.

Key to the interpretation and viewing of Gettysburg National Military Park are the park avenues that are currently in use. The avenues include two types of roads, those that follow the alignments determined by the War Department and those that had their alignments altered by the National Park Service, resulting in avenues that typify ideal national park roads as well as those that defy the rules of both park and public roads.⁷ Within these two categories there exist an astounding variety of road types, surfaces, alignments and widths, which have survived as rich and tangible evidence of Gettysburg's developmental and interpretive history. The avenue widths range from 10' to 27' for one-way avenues and 12' to 21' for two-way avenues.

The National Park Service definition of park roads differs greatly from the roads already in place when it assumed control of the park.⁸ The War Department Avenues quite literally

⁷ This report deals with those avenues built before the National Park Service assumed control in 1933. A study of those roads built during the National Park Service's administration should be done.

⁸ I refer to two different sets of standards, those adhered to when the park administration changed from the War Department

followed the contour of the land, increasing at no more than a 5 percent grade to disturb the topography as little as possible. While beautiful avenues were desirable, the driving experience was secondary to a faithful retelling of the battle story. Carriages were not expected to exceed 7 miles per hour, the speed of a horse at an elegant and comfortable trot, so the curves added interest rather than danger. During the 1930s, there were proposals to change every avenue, some adding curves to relieve the monotony of straight lines, others removing curves that were determined to be unpredictable and dangerously sharp.⁹ Not all of these plans came to fruition due to lack of funding and the onset of World War II. The roads that adhere to elements of park standards today came to be that way through modification of War Department avenue construction and alignments. The War Department avenues whose alignments remain intact have been altered in other ways. The influence of the NPS is visible in the modified gutters, culverts, grassy roadside slopes, and specimen trees, which offer shade in areas that otherwise would have none. Nearly all of the avenues, regardless of their dates of construction or alteration, are lined with monuments, markers and cannon, and all of the avenues have been altered where they intersect with public roads.

One of the less touted yet visually significant features of the road system in Gettysburg is the farm lanes. Over the years many of the alignments have been altered to change their access from public roads to the avenues, depending upon which was more convenient for the individual farm. The park abandoned other farm lanes as changing farming practices led to increased field sizes. Most of the lanes are surfaced with gravel and are in frequent use by the farm residents. During the early stages of the agricultural leasing program set up by the War Department, the farmers who leased the farmland usually also occupied the farmstead. Now the structures are more likely to house park employees. At the entrances to the lanes the park has posted

to the National Park Service, and those which guide the park today in its landscape treatments. See U.S. Department of the Interior, National Park Service, *Park Road Standards* (Washington, D.C., 1984).

⁹ U.S. Bureau of Public Roads, *Master Plan for Proposed Changes to Gettysburg National Military Park Roads, 1937*. MC9 DRC, Folder 6 of 8, in GNMP - Archives.

signs asking that park visitors respect the privacy of the residents, leaving a somewhat ambiguous message as to whether one is free to explore the inviting routes or not. The lanes contribute to the overall atmosphere of the park as a rural, active farmscape. When troops swept over the landscape during the Battle of Gettysburg, the farm lanes became natural points for troop movements into and across the fields.

Whenever roads or avenues were deemed no longer necessary to the current use or interpretation of the park, the park administration went to great lengths to remove them, particularly those within areas of high visibility. Small drives had been a natural extension of the larger avenues, which allowed carriages closer access to popular sites without having to make tourists disembark. By the 1930s the greater concentration of automobiles touring the avenues made the small avenues points of congestion likely to cause accidents. Removing the small avenues from the road network alleviated road maintenance expenses and created a less obsolete road design. All of these avenues now serve as either official hiking or tour trails, although the more obvious signs of their past use as roadways, such as pavement, have been obliterated. Several trails through the woods near South Confederate Avenue and Big Round Top were once part of a local network of roads that gradually fell into disuse as lands were purchased for the park.. Many avenues once frequented by carriages still exist but are largely forgotten and inaccessible today, having not even been converted into hiking trails. One avenue that still receives visitors who have a sense of adventure and are willing to walk is Neill Avenue, located about a half mile off Baltimore Pike near Rock Creek. The park never acquired the lands for an improved roadway to the avenue, so the old dirt roads leading to it gradually overgrew. Park maps from the late nineteenth century show roadways throughout Wolf Hill and Powers Hill, battle locations no longer part of the current interpretation of the battlefield. Powers Hill is marked by four sizable monuments, but only one is visible from Granite School House Lane and the others can only be reached by walking through woods and underbrush.

History:

A Convergence of Roads:

In a number of written sources about the Battle of Gettysburg, the three days in July 1863 loom large in Civil War and American history. Aside from the terrain covered in the advance of the armies into Pennsylvania, the Battle of Gettysburg took place

within a closely defined and relatively small area of some 40 square miles. The short duration of the battle, the high casualty rate, and the Union victory all served to make any characteristics of the town become characteristics of the battle. Much of the history of the town of Gettysburg has been channeled into those three days, subsuming anything that came before and seemingly shaping anything that has come after.

Before July 1863, Gettysburg was a prosperous but unremarkable community of 2,000 farmers, merchants, and laborers. Being the county seat and hosting Pennsylvania College (now Gettysburg College) lent the town a cosmopolitan air that was reinforced by road connections to Philadelphia, Baltimore and Harrisburg. The battle and Abraham Lincoln's subsequent Gettysburg Address at the dedication of the National Cemetery have come to define Gettysburg to a large portion of the national and international public. The ten roads which converge in the town, likewise, ceased to be means of commerce and signs of a growing crossroads community. Instead, they became the avenues of advancing and retreating armies, the means to a great battle in a great war.

Adams County was created in 1800 when the state government split York County, formed in 1749, into two counties, with Gettysburg becoming Adams County's seat of government. The Mason-Dixon line defines the southern boundary of Adams County, a designation which would grow all the more significant for the regions' residents as the issues leading to the Civil War became more heated. Settlement, however, long predated these political divisions. By 1800 Adams County already boasted 13,172 inhabitants, made up largely of Germans in the southeastern part of the county, Scotch-Irish settlers along the Great Conewago, Marsh and Rock Creeks, the Dutch near Hunterstown, and scattered settlements of English and Irish Quakers. These populations soon cultivated many acres of the heavily forested land, clearing the black walnuts, oaks and maples dominant in the region.

The borough of Gettysburg was founded in 1786, at a location that already showed signs of being an important crossroads. The Hagerstown Road, plotted in 1747-48, connected New Oxford, Pennsylvania, with Hagerstown, Maryland, on an east-west route which passed through the future site of Gettysburg. Soon after, in 1769, the Baltimore-Shippensburg Road, now known as the Mummasburg Road, created a north-south access from the Maryland

line through Gettysburg, across the mountains, and on to Shippensburg.¹⁰

Other than a growing network of farm lanes and local routes that were characteristic of rural communities, few major road developments occurred in the Gettysburg area until 1807. In 1793-95 the construction of the Lancaster Turnpike east of the Susquehanna River spurred national interest in quality roads, even though private enterprise funded and operated most of these roads. Originally constructed using broken stone and gravel, the Lancaster Turnpike engineers soon discovered that they needed to turn to the road-building techniques gaining popularity in Europe, which stressed adequate drainage and continuing maintenance for the preservation and quality of the road surface. The charter for the Gettysburg and Littlestown Turnpike in 1807, inspired by the Lancaster Turnpike, resulted in the construction of the first engineered road in Adams County and likewise established better communication and trade between Baltimore and Pittsburgh. Soon thereafter came the York to Gettysburg Pike, the Baltimore to Carlisle Pike, and the Gettysburg and Black Tavern Turnpike. The roads operated on a toll system with toll-gates constructed along the routes to collect fares from travelers. By 1831 nearly 220 toll road companies operated in Pennsylvania, maintaining approximately 2,400 miles of roadway.¹¹ That Gettysburg became the focus of several toll companies reveals the population was plentiful and economically sound enough to promise profit for investors, as was the promise of an unsettled and growing United States populace steadily moving west into newly opened territory.¹²

¹⁰ Adams County, Pennsylvania, to 1950 (Adams County Sesqui-centennial, 1950).

¹¹ Ibid.; George R. Beyer, *Pennsylvania's Roads before the Automobile*, Leaflet No. 33 (Harrisburg, PA: Pennsylvania Historical and Museum Commission, 1972), 3.

¹² For detailed information on the complex development and alignment evolution of the roads around Gettysburg, see Elwood W. Christ, "Building a Battle Site: Roads to and through Gettysburg," *Adams County History*, vol. 3 (1997), 41-70. The article is most valuable to those already familiar with Gettysburg place names and dates and local history, but is still useful as a valuable reference source for anyone who desires to

The National Road (also known as the Cumberland Road and the National Pike) was an exception to the small privately owned and operated toll roads and, after the Lancaster Turnpike, became one of the most notable highway construction efforts in the early United States. The road was part of the dream of George Washington and Thomas Jefferson to create a viable national link across the United States, and its construction plans reflected that ambition. The road called for a 66' right-of-way and an 18" deep stone pavement 20' across. Perhaps not coincidentally, the initial specifications for the National Road were not unlike those selected by the Gettysburg Park Commission nearly ninety years later.¹³ After many years of rallying support, the project finally began in 1811, reaching the Ohio River at Wheeling, Virginia, in 1818. Expenses, the War of 1812, and other administrative problems delayed the highway's construction so that it did not reach Springfield, Ohio, until 1838. The National Road required what was then a phenomenal outlay of money, funded mostly by land sales. Eventually, the highway construction effort floundered and sections of the road fell into disrepair even as it was being constructed. In 1822, President Monroe declared the project unconstitutional and refused to sign legislation for its repair. Federal funding ceased entirely in 1838.¹⁴

Both the Lancaster Turnpike and the National Road were significant to road building in and around Gettysburg, although neither of the roadways actually reached Gettysburg. Their existence in Pennsylvania influenced the activities of funders for smaller road-building enterprises. However well-constructed the toll ways or any of the roads of the day may have been, their regular maintenance required a continued outlay of money and labor. Roads built with care for drainage and an even surface were an exception throughout the nineteenth century, even though new engineering methods were gaining prominence. Most roads,

untangle the web of roads and road names. I appreciate Mr. Christ directing me to his article.

¹³ Gettysburg National Military Park Commission, Annual Report, 1895 (Washington, D.C.: Government Printing Office, 1893-1922).

¹⁴ Beyer, *Pennsylvania's Roads*, 3.

even around Gettysburg, were little more than cleared strips of land with minimal effort made to bridge streams or swampy areas.

Just as road technology began to improve, canal and railroad building began to draw interest away from a national network of improved roads. Adams County's first venture into building a railroad came with the "Tape Worm" Railroad, intended to run southwest from Gettysburg. After preparing and grading the line, the project ran out of funding and the railroad grade remained unused for nearly thirty years, until it became the fateful landmark in the Battle of Gettysburg known as the "Railroad Cut." A functioning railroad did not operate in Gettysburg until late 1858, when a line opened from Gettysburg to Hanover Junction.¹⁵

The geology which defines Gettysburg and its surrounding landscape and which drew its early settlers to the valley also determined that the many roads would converge here. While many post-Civil War writers would claim romantically that fate played a hand in the two armies meeting at this point on northern soil, the lay of the land and the roads played a greater role. In his movement towards Gettysburg, General Lee chose to advance through the Cashtown Gap, one of the only mountain passes through which it was possible to move a large force of artillery and wagon trains. The route up from Virginia through a valley to Chambersburg, Pennsylvania, passed over gentle grades and on reasonably good roads, allowing the Confederates quick entrance into Union territory practically before the Federal army could

¹⁵ Adams County, Pennsylvania, to 1950, 5; Robert L. Bloom, *A History of Adams County, Pennsylvania, 1700-1990* (Gettysburg: Adams County Historical Society, 1992), 269. Bloom places the date of the railroad's entrance into Gettysburg in 1859. Naming the exact dates that the various roads and railroads opened would require more research. Nearly all of the secondary sources consulted for this project give contradictory information on construction dates, by as little as one year and as much as ten years. The point of this section, to summarize, is that transportation and building methods were changing rapidly, each having a dramatic effect on whatever one had been in favor before. While the author has tried to use common sense in selecting one citation's information over another, the purpose here is to convey the idea and impact of the changes rather than the specifics of the changes. Many of the local historic sources did not have citations for their sources.

determine their movements.¹⁶ The Gettysburg Basin, east of Lee's position as of June 28, is a wide plain distinguished geologically only by long swatches of granite outcrops that in 1863 would soon mark scarcely elevated battle positions and offer scant shelter. The road patterns converging upon this plain were such that the widely scattered Confederates had no choice but to pass through the town of Gettysburg. In 1897 John M. Vanderslice, the official historian of the Gettysburg Battlefield Memorial Association, wrote, "Ten roads concentrate in the town almost as regularly as the spokes of a wagon-wheel." This metaphor further popularized the image of Gettysburg. "It would seem," Vanderslice continued, "as if Gettysburg had been designed by nature for a battle-field."¹⁷

The Battle of Gettysburg:

Prelude to the Battle:

By the summer of 1863, after two years of civil war, the ultimate fate of the United States was still uncertain. Beyond the Appalachian Mountains, in the western theater where the North ultimately won the war, a brilliant campaign by Ulysses S. Grant had encircled Vicksburg, the last significant Confederate outpost on the Mississippi River. On the seas, the Union navy had effectively blockaded Southern ports, strangling the Southern economy. However, victory for the Confederacy required not the conquest of the North, but its demoralization or fatigue. The South had its best chance to accomplish this goal in the cramped confines of the eastern theater, where 100 miles separated the

¹⁶ Andrew Brown, "Geology and the Gettysburg Campaign," *GeoTimes*, July-August 1961, 7-11. "Round Top stands at 785 feet above sea level, Little Round Top at 650 feet. Between Little Round Top and Cemetery Hill, the ridge drops to about 570 feet. For comparison, the elevation of the town of Gettysburg is about 500 feet. Seminary Ridge, the Confederate position on the second and third days of the battle, stands throughout most of its extent at about 560 feet, but rises northward to 650 feet at Oak Ridge."

¹⁷ John M. Vanderslice, *Gettysburg: Then and Now, the Field of American Valor* (New York: G. W. Dillingham Co., 1897), 43.

belligerent capitals -- and where Robert E. Lee commanded the veteran Army of Northern Virginia.¹⁸

The campaign that culminated at the Pennsylvania crossroads town of Gettysburg marked the farthest extent of Lee's efforts to force a peace bringing Confederate independence. This campaign rightfully began at the moment of Lee's greatest battlefield triumph. At the end of April 1863, the new commander of the Army of the Potomac, Joseph "Fighting Joe" Hooker, had launched his army upon the offensive. Hooker crafted a plan that would use maneuvers to drive Lee's army into open terrain, where his two-to-one superiority in men would crush Lee and finally end the rebellion. "May God have mercy on General Lee," Hooker boasted, "for I will have none." The ensuing week of battles proved the boast premature.

Demonstrating tactical flair and a psychological mastery of his opponent, Lee boldly ignored the most accepted of military truisms. In the face of an undefeated and much larger enemy, Lee divided his army, sending half of his troops, under the command of Thomas J. "Stonewall" Jackson, on a roundabout flanking march. Jackson's troops erupted from the thick forests upon the unprepared troops of Oliver O. Howard's undersized Eleventh Corps, which nearly collapsed as it retreated in disorder. Though salvaging his battle line, Hooker was psychologically beaten, a state made worse when a cannonball knocked him unconscious for several hours.

The resulting Confederate victory, acknowledged for its brilliance in both the North and the South, prepared the tableau for the confrontation two months later. The Northern troops who pulled back across the Rappahannock that May were far from

¹⁸ The following account of the Battle of Gettysburg is drawn from these sources: James M. McPherson, *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988); Frederick Tilberg, *Gettysburg National Military Park*, Pennsylvania, National Park Service Historical Handbook Series, No. 9 (Washington, D.C.: Government Printing Office, 1954); General Edward J. Stackpole and Colonel Wilber S. Nye, *The Battle of Gettysburg: A Guided Tour* (Harrisburg, PA: Stackpole Books, 1963); and W. C. Storrick, *The Battle of Gettysburg: The Country, The Contestants, The Results* (Harrisburg, PA: The McFarland Company, 1966).

defeated. Many were bewildered by the result, for Hooker had left several of his corps out of the fight altogether. They had executed Hooker's complicated plan with precision and a tough competence that showed even in their retreat over a swollen river in the midst of a driving storm. These Northern men, volunteers like the Southerners who faced them, had never bested Lee, but they had developed a resilience that resisted the demoralization of even repeated defeats, setbacks they attributed to their officers rather than themselves. This same resilience prevailed among the army's corps commanders, as well as that color of doubt about the wisdom of the orders they received. After all, a majority of the corps commanders had voted to counterattack; Hooker had overruled them and ordered retreat.

For Lee, the results of the battle were bittersweet. Lee's army had reached the height of its considerable powers. In the midst of the battle, Lee had ridden into the clearing surrounding the burning Chancellor mansion, and the exhausted and ill-fed soldiers had cheered him wildly. But Lee's most brilliant lieutenant, Stonewall Jackson, died soon after the battle from wounds received as he prepared to continue the attack. And despite the boldness of the attack that had cost Jackson's life, the Union army had again escaped the destruction that was always Lee's goal. That army, he knew, would return to the fought-over fields of Virginia, fortified anew by the bounty of the North's farms and factories even as the strength of his own cause dwindled from hunger.

This need to reach a decision soon was a primary motivation for Lee's incursion into Maryland and Pennsylvania. Lee intended not an invasion but a massive raid, since with his meager resources he had no hope of conquering territory. Using the protection afforded by the Shenandoah and Cumberland valleys, he could supply his army from the rich agricultural lands of central Pennsylvania and threaten the state capital at Harrisburg, as well as Philadelphia, Baltimore and Washington. This threat, he rightly expected, would draw the Army of the Potomac into battle. An outcome favorable to the South, Lee hoped, would not only force the recall of Grant's army, but it could also lead to Northern demoralization, a strengthening of the Northern Peace Democrats, and perhaps a negotiated independence for the Confederacy. His plan, bold as always, assumed not only that Northern troops and citizens were dispirited, but also that he could retain the psychological edge he had gained over the commander of the Army of the Potomac.

It was thus with high stakes that, in early June, Lee interrupted the wary calm in northern Virginia and began moving his soldiers north. With Jackson gone, Lee reorganized his 75,000 soldiers into three corps, the first under the command of the redoubtable James Longstreet, the others to two promoted division commanders, Ambrose Powell Hill and Richard S. Ewell; J. E. B. "Jeb" Stuart commanded the large division of cavalry. The Army of the Potomac, which began the campaign with Hooker still at its head, mustered some 90,000 men. Since Union divisions and corps were generally smaller than their Confederate counterparts, they were divided into seven infantry and one cavalry corps.

Lee's army, with Ewell's corps at its head, screened its movements using the Blue Ridge Mountains and the cavalry brigades that Stuart had left with the main body of the army. On June 28, two Confederate corps reached Chambersburg, 16 miles into Pennsylvania, while another corps reached Carlisle and York, with one division passing through Gettysburg on June 26. Lee's plan to converge upon Harrisburg seemed to be proceeding well. What Lee did not realize was that the Federal troops, while shielding the major cities on the coast, were marching northward with unexpected speed, their pace quickened by a friendly populace. Stuart's main cavalry force, cutting across the rear of the Union army, had become separated by that army's rapid advance, leaving Lee bereft of Stuart's typically excellent intelligence services.

June 28, the day that Lee learned the Army of the Potomac was dangerously near the scattered elements of his army, was also the day the President Lincoln accepted Hooker's resignation. In the midst of a confusing campaign, with battle imminent, Lincoln promoted George Gordon Meade, commander of the Fifth Corps and a native Pennsylvanian, to the command of the army. Not a dashing figure like many of his predecessors, Meade possessed a determined unflappability that would prove more effective. Demonstrating his mettle in the week following his appointment, Meade would command the Army of the Potomac for the remainder of the war.¹⁹

¹⁹ Though Grant, the first U.S. soldier since George Washington to hold the rank of lieutenant general, would make his headquarters with the Army of the Potomac from 1864, his post was General in Chief, in command of all of the Union armies; Meade continued as an immediate subordinate.

July 1:

Gettysburg emerged as the battlefield because its ten roads radiated toward both armies, providing a natural point of convergence. When Lee learned of the Union army's movements, Gettysburg provided the best location to concentrate his forces from Chambersburg, Carlisle and York. In pursuit of Lee, Meade's army followed the converging roads northward from the Maryland towns of Emmitsburg, Taneytown and Baltimore.

Planned by neither commander, the battle commenced as a meeting engagement on ground chosen by those first to reach the field. Meade, a military engineer by training, was preparing a strong defensive position along Pipe Creek in Maryland. Lee expected to force Meade to attack, allowing him to unleash another crushing counterattack.

Lee had cautioned his corps commanders against bringing on a general battle before the bulk of the army arrived. The absence of Stuart's cavalry, however, deprived these commanders of accurate knowledge of what lay ahead of them in this unfriendly country. When men of Henry Heth's and William Pender's divisions, of A. P. Hill's corps, reconnoitered toward Gettysburg in the early morning, they expected to find nothing more formidable than the militia they had routed several days earlier. Instead, they found men of John Buford's cavalry division, fighting dismounted with breechloading carbines. Buford had noted the strategic importance of the town, a crossroads with defensible ridges. Deployed astride the Chambersburg Road, his heavily outnumbered brigades held for two hours as the Confederate infantry, expecting to roll over unsupported cavalry, charged repeatedly. Buford despatched an urgent appeal for help as units in the area marched to the sound of the guns.

At 10:00 a.m., help for Buford arrived via the Emmitsburg Road in the form of John Reynolds and his veteran First Corps. As the tired cavalymen finally began to yield, Reynolds' corps double-timed to form a line of battle, spearheaded by the black-hatted westerners of Meredith's Iron Brigade, who lost two-thirds of their numbers to bring the Confederate attack to a halt. As Reynolds placed his men, however, he fell from his horse, dead from a sharpshooter's bullet. As Abner Doubleday assumed command of the corps, fighting surged across Chambersburg Road and the parallel railroad cut. Though outnumbered by Ewell's divisions, the First Corps held its ground.

Hancock Avenue. Small iron tablets bearing capital letters were placed at 200 yard intervals along the avenues, generally in front of monuments just off the edge of the avenue.¹⁸¹ The letters gradually disappeared and there is no longer a system to designate particular points in the avenue system. When today's radio dispatchers announce the scene of accidents, downed trees, or a nest of bees in the ground, they now must approximate the location according to neighboring monuments or nearest intersections, which can particularly challenge one's skill in knowing the location of landmarks.

Progress on making the battlefield accessible had advanced thoroughly enough that the commission also took steps in 1900 to place small iron inscription tablets at "points of interest" throughout the battlefield. Some of these locations, like Reynolds Woods, had been identified with hand-painted signs since the GBMA days. Key points of interest now identified were the Angle, Loop, Spangler's Spring, Excelsior Field, Trostle House, Bryan House, G. Weikert House, Wheatfield, Devil's Den, Reynolds Woods, Barlow Knoll, Stevens Knoll, Spangler's Woods, Zeigler's Grove, Culp's Hill, Little Round Top, and Oak Ridge. E. B. Cope designed rectangular field inscription tablets, with the names and a border raised in the iron as part of the moulding process. The raised sections were painted to distinguish the lettering from the iron background, making them thoroughly visible at a distance, particularly for those traveling at the leisurely pace of a horse-drawn carriage. They stand an average of 2' off the ground, mounted at an angle on small fluted posts. Their presence on the field helped to literally give names on the landscape to sites that were famous in print and legend. Most of these tablets still stand where they were placed, serving the purpose for which they were designed. Avenue markers used the same design, giving the field a consistent signage and location identification system. More detailed battle information about the various brigades and corps would come later, when the commission felt that it had sufficient information and funds to place substantial granite and bronze markers on the field. The NPS also erected additional identification signs during various periods and fashions of the Gettysburg's transformation under the development under the Park Service, but the War Department iron, and granite and bronze markers still serve as a consistent

¹⁸¹ Nicholson, Journal, 114.

on the field, mostly via the Baltimore Pike and Taneytown Road, as did Meade himself. Inspecting the terrain in the moonlight, Meade laid out a compact line that stretched from Culp's Hill on the right through Cemetery Hill in the center and down to Little Round Top on the left -- the famous "fishhook." Two of Longstreet's three divisions arrived down the crowded Chambersburg Pike overnight. Lee's corps extended from Seminary Ridge on their right to Benner's Hill, opposite Culp's Hill, on the left flank. Nevertheless, by daylight the heretofore outnumbered Union army, though still without the Sixth Corps, the largest, would hold a slight advantage in numbers.

July 2:

Always aggressive, Lee determined to continue the attack, despite the contrary advice of Longstreet, his most trusted lieutenant. "The enemy is there," he replied to Longstreet, pointing at Cemetery Ridge, "and I am going to attack him there." Without accurate knowledge of enemy strength and operating in the enemy's country, Lee felt his army must retain the initiative. With the confidence imbued from a string of hard-won successes, he fashioned an attack that would fall upon both flanks of Meade's forces. Longstreet, with Pickett's still-marching division replaced by a fresh division from Hill's corps, would conduct the main attack upon what Lee believed to be the Union left flank on Cemetery Ridge. On Meade's right, Ewell would demonstrate against Culp's Hill, attacking in earnest when Meade withdrew reinforcements to meet Longstreet's assault. If he could crush Meade's flanks, Lee knew, he could surround and annihilate the entire Federal army. He would finally have his war-winning victory.

The morning passed with little activity as Longstreet attempted, with difficulty, to move his men into attack positions without being observed. While Longstreet's troops marched and counter-marched, Daniel Sickles, a controversial political general, reconsidered the position of his Third Corps. At Chancellorsville, Hooker had unwisely ordered Sickles to withdraw his men from excellent defensive terrain which Lee had then used to reunite, mass artillery, and punish Sickles' corps. Meade expected Sickles to occupy the terrain between Cemetery Ridge and the key height of Little Round Top. Cemetery Ridge, however, was not a true ridge but only a modest upswell, and Sickles thought the position lacked adequate fields of observation and fire. Shortly before noon, Sickles sent Berdan's Sharpshooters and the Third Maine Infantry on a reconnaissance into the Pitzer Woods

beyond the Emmitsburg Road. When they hurriedly returned after skirmishing with much larger forces, Sickles surmised an attack was imminent.

Without direct orders, Sickles moved his two divisions a half mile forward to what he considered a more defensible position, the high ground of a peach orchard. His new line ran along the Emmitsburg Road on his right through a wheat field and a rocky area known locally as Devil's Den on his left. This new position left the Third Corps occupying high ground but in an exposed salient with both flanks uncovered. Because of the small size of the corps, the critical heights of Little Round Top remained occupied by only a signal station. Meade discovered the move too late to order Sickles' withdrawal.

Longstreet planned to attack with his three divisions in echelon, with the brigades on the right beginning the assault, to be joined successively by those to the left. Such an attack would ruthlessly expose and exploit weaknesses in the Union line. Scouts from Hood's division on Longstreet's right had discovered that the Round Tops were unoccupied and dominated the Federal position. Hood argued that the attack should shift right, to flank the Union line and approach the position from the rear. Since Lee had already twice denied his similar requests, however, Longstreet ordered his men forward as planned at around 4:00 p.m.

However tactically unwise, Sickles' advance thus blunted Longstreet's powerful assault. The cost was the virtual destruction of the outmanned Third Corps. Longstreet's veterans punched through the salient in a ferocious and chaotic assault. The echelon attack, however, allowed Meade time to draw reserves from less threatened portions of his line. When one Confederate brigade broke through the Peach Orchard, reaching the Plum Run valley between Devil's Den and Little Round Top, Union reserves halted their attack in a bloody charge that earned the area the nickname "The Valley of Death." In the Wheatfield, regiments from five different Union and Confederate corps battled across the field, which changed hands half a dozen times.

Despite Meade's skillful husbanding of his troops, the Confederate assault came perilously close to success. Gouverneur K. Warren, Meade's chief of engineers, discovered that Little Round Top was unoccupied on the verge of an attack. On his own initiative, Warren redirected to the critical heights a division

from the Fifth Corps, one brigade of which arrived moments before a brigade of Alabama troops advanced up the slope of the hill. The Federals repulsed repeated charges, in part with a memorable bayonet charge by the Twentieth Maine Infantry. Another Alabama brigade came similarly close to success a mile to the north. With this brigade headed directly toward a gap on Cemetery Ridge left by Sickles' advance, Hancock had at hand only the depleted First Minnesota Infantry, a veteran unit with the army since Bull Run. In a desperate charge against more than six times their own number, the First Minnesota blunted the attack, suffering losses of 82 percent, the highest recorded in the battle.

Though Longstreet's attack failed to break the Union line, it did succeed in part of Lee's plan, the drawing of troops from other parts of the Federal line. Meade withdrew all but one brigade of the Twelfth Corps from Culp's Hill, greatly weakening that position. Lee had directed Ewell to demonstrate against the Union right simultaneous with Longstreet's attack, and to be ready to exploit just such an opportunity. His troops harassed by accurate Union artillery fire, Ewell did not begin his attack until near dusk, after Longstreet's assault had ended. However, the Union positions on Culp's and Cemetery hills, with numerous stone walls rebuilt and reinforced as breastworks, were formidable even when poorly manned. In a night action rare in the war, Ewell's troops momentarily reached the crest of Cemetery Hill against the hapless Eleventh Corps before being driven back by reinforcements from the Second Corps. On Culp's Hill, the small brigade of "Pop" Greene, one of the oldest officers on the field at age 63, took full advantage of the fortifications and darkness in holding off an attack by greater numbers. However, Johnson's division did succeed in taking trenches left unoccupied by the Twelfth Corps' earlier withdrawal and camped within 200 yards of the Baltimore Pike.

That night, Meade gathered his corps commanders at the Leister house. As they had at Chancellorsville, the corps commanders urged the army to defend the field they had thus far successfully held. Meade concurred, and warned that he expected Lee would attack in the heretofore quiet center of the line.

July 3:

Lee did not entirely intend to fulfill Meade's prophesy. His attacks had retained the initiative with inferior numbers and several times had nearly succeeded. His divisions had suffered losses, but no worse than the heavy toll exacted in any major

battle, and his army was finally fully assembled, including Stuart's tardy cavalry. More importantly, Longstreet's Third division, under George Pickett, had arrived, and two more divisions of Hill's corps were still relatively fresh. In his previous battles, Lee had driven these same opponents from similar situations where the terrain favored the Northern men, but the psychological edge rested with the Southerners.

As Meade anticipated, Lee wished to strike the Union center, which he thought must have been weakened to reinforce both flanks. Lee's army had effectively used massed artillery at Chancellorsville, and Lee would redouble that effort in a cannonade against Cemetery Ridge. He would entrust the frontal assault to the always reliable Longstreet. While Ewell renewed his attack against Culp's Hill, threatening the Union right and rear, Stuart would support by swinging his cavalry farther to the east, poised to exploit the expected Federal retreat.

Lee's estimate of Union morale, however, was mistaken. As at Chancellorsville, the Northern soldiers felt confident that they could hold their ground, and this time their commander shared that confidence. Meade had no more accurate a notion of Lee's strength (almost always overestimated) than did his predecessors, but he did recognize that his own strong position was growing stronger, with two corps as yet barely engaged. Meade moved artillery from the army's reserve to support both Cemetery Ridge and Culp's Hill.

Before daylight, artillery moved to the Baltimore Pike opened the third day of battle by shelling Johnson's division at Spangler's Spring, forcing it uphill where it collided with Geary's Federal division attempting to retake the trenches that the Confederates had occupied overnight. The fighting quickly spread across the hill. By late morning, the Twelfth Corps had driven Ewell's soldiers from their captured breastworks and frustrated Lee's design once again.

Preparations for Longstreet's assault, which Lee planned for late morning, again took longer than expected. Not until after 1:00 p.m. did the cannonade commence, the 150 guns providing the largest Confederate bombardment of the war. After a brief pause, Union artillery replied, and for two hours nearly 300 guns dueled in a cacophony audible as far away as Pittsburgh. The bombardment's results, however, fell far below Lee's expectations. Linear formations of troops were difficult targets

to the artillery of the day, especially when those troops were able to find cover behind stout stone walls. After two hours, mistaking movement in the Union lines for retreat and running short of ammunition, the Confederate artillery commander urged an immediate assault.

Longstreet reluctantly complied. Three divisions, under Pickett, Rodes and Pettigrew and totaling some 13,000 men, advanced from the cover of Spangler's Woods on Seminary Ridge and emerged onto the mile of open ground that separated them from Cemetery Ridge. The advance, conducted with memorable precision in full view of thousands of waiting Federals, soon ran into trouble. Union artillery from as far away as Little Round Top fired into the advancing lines with good effect. Regiments from Vermont, New York and Ohio advanced against the flanks of the attacking columns, and when the attackers reached the Emmitsburg Road, where wood fences delayed them, Federal infantry crouching behind stone walls added to the volume of fire. Several hundred Confederates rallied to their objective, a distinctive clump of trees, and crossed the stone wall at what became known as the "Bloody Angle," but all were soon killed or captured. Only half of those who began the charge returned to their own lines.

To the east, the final part of Lee's plan also met failure. While the great cannonade still thundered, Stuart's cavalry, moving to exploit a successful infantry assault, was discovered near the Hanover Road by a smaller Federal cavalry force under Irvin Gregg. As it had at Brandy Station a month earlier, the Federal cavalry attacked. After a confused and lengthy melee that outlasted Longstreet's attack, the Southern troopers withdrew from the field.

As the smoke cleared from Cemetery Ridge and quiet returned to the battlefield, the Union survivors realized the magnitude of their victory. They had finally beaten Robert E. Lee. When Meade rode along the line successfully held, his men stood and cheered him as Lee's had done at Chancellorsville two months earlier.

Aftermath:

Gettysburg was the last battle of its kind in the eastern theater of the war. The Army of Northern Virginia would never recover from the 28,000 men lost at Gettysburg, and Lee would never again take the offensive. The Army of the Potomac would replace the 23,000 men lost, but these men would be different from the eager volunteers of 1861-62. Many of the new soldiers to both armies

would be conscripts. A week after Lee began his retreat from Pennsylvania, the first draft lottery set off the worst riot in American history in New York City. Troops recently at Gettysburg repeated their musketry in the city streets, finally ending the riot. Gettysburg was the last great battle of volunteers in the east.

The battle also marked a turning point in the style of fighting. Except on Culp's Hill, where extensive fortifications foreshadowed the entrenchments that would come to dominate future battles, the rocky soil limited "digging in." The soldiers thus fought in open terrain, where heroism could still find an audience. When Grant moved east to give the war effort his own grim determination, there would be room for few heroes at places like the Wilderness, Spotsylvania Courthouse, Cold Harbor, or the Crater.

His army exhausted from its narrow victory, and perhaps a bit incredulous that he had defeated the architect of Chancellorsville, Meade did not counterattack. The Confederates were battered but alert, and badly cut up a locally-ordered counterattack by one Federal cavalry brigade south along the Emmitsburg Road.

As if daring Meade to attack, Lee remained with his army on the field through a rainy July 4. Many miles to the west, Vicksburg surrendered to U. S. Grant. The "high water mark" of the Confederacy had passed. Five months later, Abraham Lincoln would arrive on the battlefield and announce his vision of "a new birth of freedom."

The National Cemetery:

Momentum for creating a memorial site at Gettysburg began almost as soon as the battle had ended. The town of Gettysburg and its surrounding land were no longer what they had been as farms and fields lay in ruins and the departing armies left behind their dead and wounded. In the immediate aftermath of the battle, visitors descended upon the small Pennsylvania town. Some were in search of fallen relatives or friends or battlefield relics, but others sought an understanding of the enormity of what had just transpired. The battle site was not only in the North, but also marked a clear Northern victory -- a rare combination emphasized by the massive scale and high stakes of the battle. Inevitably, footsteps and wagons soon wore paths to the best-known landmarks, including Cemetery Hill, Little Round Top,

Seminary Ridge, Spangler's Spring, the Peach Orchard, the Wheatfield, Devil's Den, and Wolf and Culp's Hills. These landmarks took their names from the topography, landmarks, and local landowners. The Valley of Death and the Bloody Angle, on the other hand, immortalized the loss of life and devastation that had occurred during the battle.

Out of this fascination for the site and the tragic proportions of the battle came two unusual developments that helped shape the growing meaning of the event for the American public. First, the creation of the Soldiers' National Cemetery, in conjunction with President Abraham Lincoln's famous Gettysburg Address at its dedication, offered both a philosophy for the memorialization of the site and gave the continued struggle meaning for the living. Second, the Gettysburg Battlefield Memorial Association (GBMA), founded privately by prominent local citizens in the aftermath of the battle, followed this sentiment in attempting to preserve sections of the battlefield itself as the most fitting memorial to those, living and dead, who had participated in the great struggle. The first Civil War battlefield to either produce a memorial burial ground or to preserve portions of the battlefield, Gettysburg became a model for future Civil War battlefield parks and memorial sites.

The creation of the cemetery grew out of a very practical need to bury the dead of Gettysburg, many of whom lay buried in shallow graves nearly where they fell. Others, who died of their wounds after the battle, received less hasty treatment and were spared anonymity, but also did not receive a ceremonial interment. It did not take long before many realized that there not only needed to be a more systematic burial for those who died, but that the grounds to honor the dead should be on land where the soldiers helped secure Union victory. The project required urgency due to the hot summer sun and the farmers' need to plow their fields again to make up for losses and to prepare for the coming winter. The temporary graves and identity of the dead had been marked hastily by comrades or through whatever other tangible evidence remained of the soldiers' identities. The sight of dead men protruding from their hasty graves "cried out for humanity."²⁰

²⁰ "William Saunders," in *Dictionary of American Biography*, vol. 16 (New York: Charles Scribner's Sons, 1935), 383-84; "National Soldiers' Cemetery at Gettysburg," *Congressional Record* -- Appendix (12 February 1929), 192-93; Kathy Georg Harrison,

According to most accounts of the creation of the Soldiers' National Cemetery, David Wills, a Gettysburg attorney and a local judge, first conceived of the idea of creating a permanent burial site at Gettysburg. Pennsylvania Governor, Andrew G. Curtin, appointed Wills as his agent to acquire land and to come up with an appropriate design for the graveyard. Wills selected 17 acres of land that had been successfully defended by the Union forces. The land, already known as Cemetery Hill for its close proximity to the Citizens' Evergreen Cemetery, occupied an angular plot of high ground with sweeping views of the town of Gettysburg and much of the surrounding territory that, only weeks before, overlooked and had been a focus of the fighting. The cemetery was to be strictly a Northern effort to inter the Union dead, with the Confederate dead remaining in their battlefield graves until long after the war ended.

Within six weeks of the battle Wills contacted William Saunders to draw up a plan for the cemetery. Saunders' plan for the National Cemetery set the tone for all future design and work at the battlefield park. A Scottish-born and -trained horticulturist and landscape architect, Saunders arrived in the United States in 1848, when the work of such landscape architects as Andrew Jackson Downing had taken hold, changing the way that many Americans perceived their domestic and public landscapes. Thriving as well were changing ideas of how one should regard and bury the dead. Instead of somber churchyards, the Rural Cemetery Movement encouraged laying the dead in garden-like settings, which encouraged healthful recreation and reflection. After 1831 visitors flocked to rural cemeteries not only for their beauty, but also because they "represented tangible expressions of 'noble sentiments and refined taste.'"²¹ The feelings expressed at Gettysburg exceeded the realms of sentiment and taste, becoming a ground of "sacrifice" and "patriotism" for those not only contending with thousands of deaths, but a nation still at war.

"Bivouac of the Dead: The Development of the Gettysburg National Cemetery," Vertical File #835, in GNMP-Archives; Amy J. Kinsel, "'From These Honored Dead': Gettysburg in American Culture, 1863-1938," (Ph.D. diss., Cornell University, 1992), 90-151.

²¹ John F. Sears, "Prisons, Asylums, Cemeteries, Parks," in *Sacred Places: American Tourist Attractions in the Nineteenth Century* (New York: Oxford University Press, 1989), 100.

A significant parallel between the rural cemeteries and the Soldiers' National Cemetery, as well, is that the dead were buried without consideration for their religious affiliation. The soldiers were joined under the Union cause. Saunders would have been aware of the public's acceptance of such settings when he planned the cemetery, and boldly took it a step further. Rather than bury the dead according to their rank or public stature, as he was pressured to do by some of the state representatives, he accorded each state and individual equal status. To do this he devised a semi-circular design arranged around a substantial central monument, placing those states with the fewest dead at the inner circle and those with the most at the outer circle. The unknown dead, of which there were 979 out of the 3,512 Union bodies buried between October 1863 and March 1864, were positioned at the flat edges of the semi-circle.²² Since the monument occupied the highest ground, no one could despair that his state's lost heroes were symbolically placed on lower ground. Also in line with other picturesque and famous landscape designs across the country, Saunders devised a plan that emphasized "simple grandeur," played out in the continuous lines of walkways and marble headstones across the ground. The resulting design was unlike anything the country had ever known before, yet oddly comforting and familiar because it intruded so little upon the rural landscape.

For the first several years a board of directors, made up of representatives from those eighteen Union states whose dead were interred, managed the cemetery. The board and the cemetery received official authorization on 25 March 1864 when the Pennsylvania legislature adopted "An Act to Incorporate the Soldiers' National Cemetery."²³ By the time that a law to establish and protect national cemeteries passed in 1867, the

²² Many scholars have researched the men who are buried in the Soldiers' National Cemetery and discovered many misidentifications of bodies, including Confederate men.

²³ Pennsylvania General Assembly, House of Representatives, Select Committee Relative to the Soldier's National Cemetery, *Revised Report of the Select Committee Relative to the Soldiers' National Cemetery, together with the Accompanying Documents, as Reported to the House of Representatives of the Commonwealth of Pennsylvania* (Harrisburg, PA: Singerly & Meyers, State Printers, 1865), 154-57.

cemetery at Gettysburg was nearing completion, except for the addition of the central soldiers' monument and a few other ornamental elements. The cemetery was turned over to the federal government in 1870, in accordance with the 1867 Congressional Act, thereby transferring "all the right, title, interest and care of the said Soldiers' National Cemetery" to the care of the government "whenever the commissioners and trustees having charge of said cemeteries are ready to transfer their care." The 1867 act also insured that all superintendencies, as long as practicable, were to be filled by disabled Union veterans.²⁴

Some in the North were divided about what should happen to the dead Confederate soldiers. The men in charge of burying the Union soldiers recorded each step of the reinterment process so as to assure their fellow countrymen that no Confederates were placed in the Soldiers' National Cemetery. In his speech offered at the dedication of the Soldiers Monument in 1869, General George Meade expressed his opinion that the Confederate dead at Gettysburg continued to suffer disrespectful neglect. His proffered solution, however, was more to acknowledge than to honor the men; the war was still too close to erase all hard feelings. He felt that the government should "collect these neglected bones and bury them without commemorative monuments," noting only that "below sleep the misguided men who fell in battle for a cause over which we triumphed."²⁵ The men received a more honorable burial than that, with those that could still be located removed to Richmond, Virginia, through the efforts of a group of Southern women.

Prior to the Southern soldiers' reinterment in Virginia others were more lenient in their view of how the soldiers should be treated. John B. Bachelder, a civilian observer of the Civil War who made the study of the Battle of Gettysburg his life-long career, was perhaps more generous than most. For eighty-four

²⁴ "A Resolution Authorizing the Secretary of War to take charge of the Gettysburg and Antietam National Cemeteries, approved July 14, 1870 (16 Stat. 390)" reprinted in General Management Plan for GNMP and Gettysburg National Cemetery (1982): 107; Harrison, "Bivouac of the Dead," 5.

²⁵ "Gettysburg. Dedication of the Soldiers' Monument in the National Cemetery," *New York Times*, 2 July 1869, quoted in Kinsel, "From These Honored Dead," 135.

days after the battle he interviewed battle participants from both sides to obtain as unbiased an account as he could about the specifics of the encounter. It seems that in this process he balanced his sympathies between the two armies at the same time that others hardened theirs more solidly with the North. In his guidebook of the battlefield, first published in 1873 before the Southern reburials, Bachelder used his characteristic romantic style to mourn the treatment of the dead. "It is to be regretted. . . that the Confederate dead were not collected at the same time, and placed together in some suitable lot," begins Bachelder on his tour of the Soldiers' National Cemetery. "But during the excitement incident to a state of hostilities this was neglected, and to-day there is nothing to mark the spot of the their burial, save the grass grows greener where they lay."²⁶

Throughout the decades after the Battle of Gettysburg, the Gettysburg National Military Park aspired to the same simple grandeur of the Soldiers' National Cemetery. The seemingly endless borders of the battlefield and the means to acquire the land, however, proved more limited than those to design and complete the cemetery landscape. The battlefield and the Soldiers' National Cemetery, however, have always been inextricably linked. To understand the ideas and development of one requires understanding the development of the other, particularly because the veterans themselves saw the two commemorative sites as linked. The tangible elements that transferred the static boundary of the cemetery included the wide, curving stone and gravel drive, and the walkways that allowed visitors clear access to the graves without trampling the ground itself. The erection of the bronze statue of General Reynolds in 1872, who fell on the first day of battle, altered the image of what types of sculptures were deemed appropriate for the cemetery, and inadvertently became a popular model for sculpture on the battlefield and across the country. The heroic rather than the funereal nature of the statue, designed by

²⁶ John B. Bachelder, *Gettysburg: What to See, and How to See It, Embodying Full Information for Visiting the Field* (Boston: John B. Bachelder, Publisher, 1889), 116. Much of the text is as he wrote it for the 1873 edition, with alterations and additions noting the changes to the field over time in footnotes and in the Preface. In a note he acknowledges the subsequent removal of the Confederate dead and the "appropriate ceremonies" that accompanied their reburial.

Randolph Rogers, encouraged monuments that reflected the youth and vigor of soldiers and officers, that it would always be 1863 when these men made their sacrifice for victory.²⁷ Likewise, the connection between the rest of the battlefield and the cemetery used to be more apparent, but the growth of trees and buildings crowding the open land, as well as the removal of the battlefield entrance gate on Taneytown Road and the Zeigler's Grove tower, blur the visual relationship.

The less tangible influence of the cemetery on the development of the battlefield came from Abraham Lincoln's Gettysburg Address. As the brief speech acquired greater meaning with the passing years, the words came to be recognized, as Lincoln intended, as more than a dedication to those who were to occupy the ground where he stood. "A new birth of freedom" would require continued sacrifice and could well be challenged again. The meaning of Gettysburg was and is more than the men who fought there in 1863, it was a renewal of faith for every veteran who fought in the Civil War as well as for the citizens who served the cause in other ways.

In 1892 the aging veterans made the symbolic connection between the cemetery and the battlefield literal by installing a gateway in the stone wall on Taneytown Road, close to the Hancock Avenue battlefield entrance. With this simple alteration, the cemetery carriage drive became a part of the park avenues, opening what had been an enclosed space for reflection into a thoroughfare.²⁸ Opening the gateway also made the cemetery part of a national landscape. On the battlefield had already come the call to identify the Confederate battle lines through an intersecting series of avenues. By connecting the battlefield avenues to the

²⁷ Wayne Craven, *The Sculptures at Gettysburg* (New York: Eastern Acorn Press, 1982).

²⁸ 25 August 1891, *Gettysburg Battlefield Memorial Association Minute Book, 1872-1895* (hereafter cited as *GBMA Minute Book*), GNMP - Archives, Open Shelving. The minutes read: "Col. Bachelder was authorized to communicate with the Quartermaster General of the Army and urge the importance of opening a gateway to connect the National Cemetery with the Taneytown Road at a point as nearly opposite the entrance to Hancock Avenue as practicable." Harrison, "Bivouac of the Dead," 6.

cemetery the exclusivity of the cemetery as a place for Northern reflection faded to a place to ponder the benefits of the union of foes. At that same juncture the War Department later erected a memorial to honor Abraham Lincoln and the Gettysburg Address, encouraging anyone who passed through the grounds also to make the connection between the cemetery and the battlefield through the words of Lincoln. The link, not coincidentally, was made through an avenue.

The Gettysburg Battlefield Memorial Association:

While the Soldiers' National Cemetery tended to the honorable burial of the Union dead, in 1863 the Gettysburg Battlefield Memorial Association (henceforth referred to as the GBMA or the association) made the first efforts to preserve the actual battlefield for future generations. Immediately aware of the importance of Gettysburg as the scene of a major Civil War conflict on Northern soil and as a Northern victory, the GBMA began to purchase land where significant fighting had taken place as a way to honor the men, living and dead, who had fought there.

The association went through two periods of development, from 1863 through the 1870s under the direction of a group of local citizens, and then from 1880 through 1895 under the auspices of Union veterans from across the North. The initial organization had the desire to create a distinguished historical park at Gettysburg, but money and general interest began to flag as the country moved into the fluctuating economic conditions of the post-Civil War period and tried to distance itself from the conflict. As more Union veterans began to take a renewed interest in their war years, however, they began to note that the Gettysburg Battlefield commemorated neither themselves nor their comrades in the ways first promised by the association, and took over the organization of the GBMA. The GBMA's primary purpose was to commemorate and celebrate Northern activities at Gettysburg, by preserving land and erecting monuments at points of significance across the battlefield. In the earliest commemorative development of the park, up to 1880, opening avenues was not of primary concern and occupied few of the association's energies and scarce financial resources. The first roadways, even though part of an idealized plan for the battlefield, occurred through happenstance rather than through strategic planning. Nevertheless, the roadways, which gradually became etched across the fields as tourists sought popular landmarks, formed the basis for later development.

Even though the initial preservation of the Gettysburg battlefield was done through local residents, early visitors to the field, including journalists, tourists and veterans alike, helped to promote the battlefield's preservation by circulating popular accounts of what it was like to visit Gettysburg. Local and national newspapers and popular journals published descriptions of the battle, and for years after offered detailed accounts of hikes across the major landmarks. For many visitors to the site, an early arrival at the battlefield in July 1863 meant that they encountered more vivid remains of the battle than they desired, as they saw dead men and horses still strewn across the battlefield. Even getting to Gettysburg was no easy task. The rains that deluged the field as of July 4 also turned every road to Gettysburg into mud. One Pennsylvania newspaper editor found that the only way to get from his home in Lebanon was to take a train to Carlisle and then to walk the remaining 48 miles. "The road was lined with travelers on foot, on horseback, and in every imaginable kind of vehicles," he wrote. "The roads were rivers, and the fields lakes. When not up to the knees, and sometimes body, in water we were stuck fast in the mud and sand at almost every step."²⁹

Within a matter of months visitors to Gettysburg experienced a more bucolic landscape as the town began to recover and repair the damage. The train was back in operation, and while it offered less than convenient service to any major eastern cities, it was preferable to the local roads, especially in wet seasons. What did not change was that Gettysburg continued to be a destination, as one of the closest sites for those in the eastern United States to view the devastation of war, and as a site of Union victory, crucial both strategically and to the morale of those who had seen too many defeats. By whatever means and byways available to convey tourists, the helpful, the mournful, and the curious tourists arrived.

²⁹ Lebanon Advertiser (15 July 1863), as quoted in John S. Patterson, "From Battleground to Pleasure Ground: Gettysburg as a Tourist Site." The copy of the essay that referenced this report was from a manuscript in the Gettysburg Archives, Vertical File #895, GNMP-Archives. The essay is also available in published format under the same title, in *History Museums in the United States: A Critical Assessment*, ed. Warren Leon and Roy Rosenzweig (Urbana, IL: University of Illinois Press, 1989).

The veterans themselves became some of the most frequent visitors to the field, their experience becoming a vehicle to understand the Gettysburg battlefield to anyone who accompanied them. George J. Gross published the record of his visit two years after the battle, shortly after he explored Gettysburg with Captain A. F. Cavada, a battle participant. In 1865 the memory of the conflict was still fresh and evidence still abundant in the bullet-riddled trees and the fields strewn with what soldiers had left behind. The veteran tour guide sought large and small landmarks to point out the stages of the battle and to stir his recollections, including the pre-existing roads and fence lines.

Cavada and Gross began their tour "out the Emmettsburg Road," one of the main arteries heading in and out of the town and a key landmark on both the first and second days of fighting. The road gave Cavada access to the battlefield and led him to where he began "to feel at home" after about a mile. He had to "feel" his way, because already changes had taken place on the battlefield that made definite identification of his location a challenge.³⁰ "Let me take an observation," he said, "as these fences were not here then." He oriented himself, instead, to a large walnut tree on a nearby ridge. Throughout the tour he pointed and gestured, "away over on that bare spot of rising ground," and "behind the low stone fence you see there," every landmark urging on a memory that helped him to recall the lines of battle. At the end of the day, which he relived at each flat rock, field, orchard and spring, the rebels were again "beaten back beyond the Emmettsburg [sic] Road."³¹

At this early period tension was already evident between perceptions of the battlefield by residents and soldiers. When civilians returned to their houses and farms in the days after the battle, they found their stock gone or dead, their fences remade into defensive mounds, their supplies carried away, and their walls filled with gunshot. They tried to clear the land of

³⁰ In the federal government's official records of the battlefield changes are noted that took place between the time when engineers produced maps right after the battle and when Major General G. K. Warren returned to map the field in 1868.

³¹ George J. Gross, *The Battle-Field of Gettysburg* (Philadelphia: Collins, Printer, 705 Jayne Street, 1866), 6-12. Originally published in the *Philadelphia Press*, 27 November 1865.

debris, rebuild their fences, and plant some crops by fall. "When I comes home," a German woman, whose house on the Taneytown Road served as Meade's Headquarters, said to Gross, "my house was all over blood; the sogers takes away my blankets and quilts, all my hay, and they spiled my apple-trees, my spring, and every ting." Without any apparent sympathy for her loss or her wish for compensation, Gross asked "whether this poor, frowsy German woman" would have the sense to realize that she owned what could become a major attraction, that people would pay to enter her home as surely as they would a shrine, and that enterprising intelligence could earn her back her losses.³²

Perhaps without realizing it, Gross set the tone for enterprising local citizens who did choose to profit from the potential benefits of their misfortune, yet at the same time he criticized those who tried to look for something to salvage in the devastation. "The works thrown up by our men on Culp's Hill are still to be seen," he recounted from his continued search for tangible and memorable signs of the conflict. The breastworks, however, were not exactly as they had been left by the retreating soldiers. They remained "except such portion of the timber as is being removed by the owner of the ground. Only think of the meanness of the man who engaged in pulling these monuments to pieces, and converting them into fire-wood! I could not ascertain the name of the barbarian, else I would give it."³³ What Gross and Captain Cavada sought were signs of what had remained the same. They, and many veterans who also made the journey to Gettysburg to walk across the battlefield again in search of landmarks, were destined to find the familiar quickly disappearing as many at Gettysburg sought to shake off the tangible signs of war. Even in the years immediately after the battle enough changes were evident to prompt concerned commentary about the disrespect of some for the sacredness of the battlefield, a concern that motivated further preservation efforts.

At the same time that David Wills organized the Soldiers' National Cemetery, David McConaughy, also a Gettysburg lawyer, set in motion what would become the Gettysburg National Military Park. McConaughy, President of the Citizens' Evergreen Cemetery

³² Ibid.

³³ Ibid.

Association, at first put his efforts into trying to incorporate the Soldiers' Cemetery with the financially troubled Evergreen Cemetery, but was convinced by Governor Curtin and the Soldiers' National Cemetery state representatives to sell the Cemetery Hill lands they desired for the independent project.³⁴ McConaughy's other plan, however, of preserving the battlefield to honor the federal victory, did reach fruition. His vision of preserving an actual battlefield as a memorial was not something that had previously been done. His explanatory circular, sent to important members of the community on 14 August 1863, met with a positive response from those willing to share his vision. "There could be no more fitting and expressive memorial of the heroic valor and signal triumphs of our Army," he wrote, "than the Battle-field itself, with its natural and artificial defenses preserved and perpetuated in the exact form and condition they presented during the Battles." Desiring to include as many people as could afford to buy into the organization, he offered shares at \$10.00 each. His goal reached beyond just including Gettysburg citizens; he proposed "to the patriotic citizens of Pennsylvania to unite with me in the tenure of the sacred grounds of this Battle field."³⁵ A local newspaper offered its supportive view on the GBMA's early efforts to preserve key battlefield sites and all that they contained. The trees and breastworks were "thus to be secured from the vandalism of avarice, and saved from destruction, for mere selfish and practical considerations in individual owners."³⁶

Few could imagine that the town of Gettysburg, the battlefield, and the surrounding area would ever be other than a pleasant, rural, farming community that happened to have been the scene of one of the greatest conflicts in America. David Wills noted with concern that "the earthen breastworks between Culp's Hill & Cemetery Hill & the redoubts on Cemetery Hill have already been very much defaced." But he, and likely many others, could not

³⁴ Kathy Georg Harrison, "Gettysburg -- A Happy and Patriotic Conception," Vertical File #896, GNMP-Archives.

³⁵ David McConaughy to Reverend Dr. C.P. Krauth and others, Gettysburg, 14 August 1862, David McConaughy Collection, Gettysburg College Library, Gettysburg, Pennsylvania.

³⁶ Adams Sentinel, 15 September 1863, Vertical File #896, GNMP-Archives.

envision a day when other sections of the battlefield might be threatened from anything more than farmers plowing away defenses; commercial development and massive tourism were beyond their imagination. "Little Round Top," wrote Wills, "is a steep, barren hill of rocks and stones & the stone defenses on it will never be disturbed." If people wanted to carry away rocks or bullets from the battlefield, he continued, there was plenty for everyone. On Little Round Top and the battlefield, there were rocks enough "to meet the demands of the community for all purposes for centuries."³⁷

The GBMA's subscription campaign stirred up enough interest that the organization sought to be incorporated.³⁸ The early legislation incorporating the GBMA showed that the organization's founders clearly did not feel that the battlefield would remain free of tampering if left to the general public. To offset damage to the battlefield, within five weeks of the battle McCaughy had already purchased battlefield land to hold in trust for the GBMA. He purchased major sections of Steven's Knoll, East Cemetery Hill, Culp's Hill, the west side of Little Round Top, and part of Big Round Top. The state of Pennsylvania approved the initial legislation on 30 April 1864, although McCaughy did not get repaid his investment until 1868 when the GBMA received \$6,000.00 from the state of Pennsylvania.³⁹ The

³⁷ David Wills to Governor A. G. Curtin, 21 March 1864, as quoted in John S. Patterson, "From Battleground to Pleasure Ground: Gettysburg as a Tourist Site," in *History Museums in the United States: A Critical Assessment*, ed. Warren Leon and Roy Rosenzweig (Urbana, IL: University of Illinois Press, 1989). The original can be found at the Pennsylvania State Archives, RG 26, Adjutant General, General Correspondence, Box 21 (January-June 1864).

³⁸ The GBMA charter named fifty-three subscribers and included the Union generals Meade, Hancock, and Crawford. Kinsel, "From These Honored Dead," 159.

³⁹ One of the few records available that expresses a negative view of the immediate activities of the GBMA was more a criticism against the state helping to pay for it. Critics were upset that McCaughy and the association would receive thousands of dollars for land "to the exclusion of the hundreds of people who were plundered or burnt out." *Gettysburg Compiler*, 18 September 1865,

GBMA's primary object was "to hold, and preserve, the battle-grounds of Gettysburg ... with the natural and artificial defenses, as they were at the time of said battle." Since the land itself was to be held in the spirit of a monument, embellishing that landscape with further monumentation seemed a natural and desired course of future development. The association likewise received authorization "to improve and ornament the grounds and to erect and promote the erection by voluntary contributions of structures, and works of art and taste thereon." The association sought to decorate the battlefield as one would decorate a brave soldier, covering it with granite and bronze ribbons of "great deeds" that would "perpetuate the memory of the heroes." The more decorated, the more impact the illustrated landscape would have on future generations. So while the association's first desire was to set aside sections of the battlefield, it also expressed a desire for added, visible commemoration. Tucked within the document the legislation granted the organization authorization "to construct and maintain ways and roads" on the battlefield.⁴⁰

More practical considerations soon followed the initial 1864 legislation after the association had time to operate under its established guidelines. Within two years the Pennsylvania legislature passed a supplement to the original act, offering much more specific information about the powers of the GBMA to protect, improve and obtain lands, implying that the GBMA had already encountered conflicts in carrying out their objectives. The state of Pennsylvania gave the GBMA the authority to condemn land in order to provide access to the battlefield. Also notably expanded were the powers to improve and open roadways, for the first time called avenues in a public document. As of 30 April 1866, the GBMA could "survey, locate, and lay out roads and avenues, from any public road, or roads, in the vicinity of Gettysburg," as well as "to and upon," and "in and through any portion, or portions, of said battle-grounds." The act also enabled the association to enclose the avenues with fences, and "to plant rows, or colonnades, of trees upon said roads and avenues." The battlefield landscape, while preserving the

Vertical File #901, GNMP - Archives.

⁴⁰ An Act to Incorporate the Gettysburg Memorial Association, approved 30 April 1864. Reprinted in Bachelder, *Gettysburg: What to See, and How to See It*, 127-29.

important sites, was destined to become a park worthy of the events that happened there. Although McConaughy and his fellow citizens failed to create the landscape that they imagined, they planned that Gettysburg would be filled with avenues and allees of trees equal to the finest nineteenth century parks.⁴¹

The efforts of the GBMA, especially since its founding occurred as the war continued, focused on the sites and brave acts of the Union soldiers. Soon after the war was over, however, McConaughy sought to rectify the balance of the battle tale told by inviting Southern battle participants to the field to mark their positions and share their experience of Gettysburg. The invitation for a reunion in August of 1869 was extended to all principal officers who had fought at Gettysburg as part of a larger effort "to designate the positions and define the movements" of the opposing forces. In coordinating this event McConaughy reveals that he was not only interested in creating a historic shrine at Gettysburg, but that he also valued the field's military history. As part of the invitation McConaughy explained the purpose of the GBMA:

Its object is to perpetuate the history of the Battle in its simple truth and to that end to make the Battle-field its own interpreter. It seeks to preserve the field, truly indicated, as an enduring historical memorial of the military events of the 1st, 2d and 3d of July, 1863, as a school for the study in practically illustrating the art of war, and as an ever eloquent though silent exponent, alike to citizen and foreign visitor, of the Battle of Gettysburg.⁴²

The GBMA proposed to place small "enduring memorials constructed of the Granite from the hills" at the identified positions, thus beginning the task of "illustrating" the battlefield.

⁴¹ An Act to Incorporate the Gettysburg Memorial Association - A Supplement, approved 30 April 1866. Reprinted in Bachelder, *Gettysburg: What to See, and How to See It*, 129-131. Perhaps as a sign of the troubled nature of the GBMA's early years, little documentation is known to exist about these years.

⁴² David McConaughy to General Officers of the Union and Confederate Armies at Gettysburg, Gettysburg, 20 July 1869, David McConaughy Collection, Gettysburg College Library, Gettysburg, Pennsylvania.

Significantly, the invitation and what it proposed did not exclude marking the positions of the Southern officers, implying that during the years after the war that the organization intended a fuller presentation of the battle and not an exclusively one-sided memorial. The event brought a limited number of Northern general officers and two former Confederate officers, a disappointing turnout yet one that still furthered the goals of the GBMA.

McConaughy's invitation to the Southern officers who fought at Gettysburg met with different reactions from two key Southern figures in the battle, Generals Robert E. Lee and James Longstreet. Lee politely declined the invitation by saying that prior engagements obligated him elsewhere, but added his true sentiments of the enterprise at the close of his note. "I think it wiser," he wrote, "not to keep open the sores of war, but to follow the examples of those nations who endeavored to obliterate the marks of civil strife and commit to oblivion the feelings it engendered." Longstreet offered a more favorable response, most likely because he had scores to settle regarding criticisms of his actions on the battlefield. While not able to make it to the upcoming meeting, Longstreet promised a visit to Gettysburg as soon as he could. Although he preferred to make the trip with fellow soldiers to help mark the field, if he could "only do so by myself I would prefer such a visit rather than none." Whether or not other "Southern Gentlemen" would be willing to make the journey, he could "only answer for myself."⁴³

Robert E. Lee passed his invitation on to Fitzhugh Lee, a cavalry officer who responded to its sentiments with the same gentle refusal. While he appreciated the "conciliatory spirit" of the offer and agreed to share what he recalled of his movements of the field, he could not share McConaughy's optimism that the battle should be recorded for posterity, particularly in a nation so recently divided. "I rather think and write it in all kindness," he wrote, "that if the nation is to continue as a

⁴³ General Robert E. Lee to David McConaughy, Lexington, Virginia, 5 August 1869; James Longstreet to David McConaughy, New Orleans, 12 August 1869, both in the David McConaughy Collection, Gettysburg College Library, Gettysburg, Pennsylvania.

whole, it is better to forget and forgive, rather than perpetuate in granite, proofs of its civil wars."⁴⁴

McConaughy's invitation to Union men, not surprisingly, met with more favor. At the same time that he tried to encourage Confederate officers to remember Gettysburg, McConaughy also mailed a circular for publication in local newspapers, inviting battle participants to an August 1869 reunion. Responding to the notice in the New York Tribune, Dr. R. Loughran wrote to McConaughy that he was "anxious to revisit the memorable field of Gettysburg." He requested a railway pass to get there "without the necessity of appealing to my private purse," he wrote, because he had spent his prime years in the service of the country and could not afford the fare. Col. H. S. Huidekoper of the 150th Pennsylvania Volunteers promised to attend, as well, if he could secure free passes. His tie to Gettysburg was through the kindness of a local family. "I am so anxious to see the family of Mr. Meyers living near the Catholic Church," he wrote "who in the midst confusion & danger attended me so faithfully after I had lost my arm and was a prisoner of war."⁴⁵

The early years of the GBMA produced more ideals than avenues and monuments upon the Gettysburg battlefield. Perhaps more would have attended the numerous attempts to stage reunions at the battlefield in the 1870s, but insufficient transportation did not help to offset an apparently waning interest in the battlefield. McConaughy wrote hundreds of letters to veterans of the battle urging them to begin local chapters of the GBMA; while many responded that they admired the goals, but that getting to Gettysburg just was not possible for them, and they could not see the veterans in their communities getting involved.⁴⁶ Even for

⁴⁴ Fitzhugh Lee to David McConaughy, Richland, Virginia, 14 August 1869, David McConaughy Collection, Gettysburg College Library, Gettysburg, Pennsylvania.

⁴⁵ Dr. R. Loughran to David McConaughy, Kingston, New York, 17 August 1869, David McConaughy Collection, Gettysburg College Library, Gettysburg, Pennsylvania.

⁴⁶ David McConaughy to H. C. Carey Esq., Chairman of the Philadelphia Committee, Gettysburg, 19 March 1864, David McConaughy Collection, Gettysburg College Library, Gettysburg, Pennsylvania. McConaughy wrote that his efforts to solicit

those living in the North, where most of the visitors to the field came from, simply getting to Gettysburg posed problems because the roads were more numerous than well-maintained, and any train journey required many inconvenient connections. In the 1860s the train route from Philadelphia to Gettysburg, a distance of less than 140 miles, took nearly eight hours. Some criticized putting so much money into a memorial landscape that no one would ever see, suggesting that the GBMA might better place their monuments in an urban setting. When the GBMA proposed putting up at Gettysburg a memorial to the Army of the Potomac that was to include a statue of General Meade, the *Philadelphia Press* questioned the wisdom of such an expenditure. "If the statue is erected on the field of battle," they wrote, "but one out of a thousand people would ever see it, all of whom, if it were put in a populous city, and where the great, busy mass of men could have access to it at all times, would turn to it for study and historic improvements."⁴⁷

McConaughy and his fellow members left little documentation about the early years of the GBMA, so aside from scattered correspondence and newspaper clippings it is difficult to ascertain exactly how the GBMA planned to develop the Gettysburg battlefield. McConaughy pursued a balanced tale of the battle from both the Union and Confederate officers. He was thus ahead of his time as a civilian looking back at the war, even if it is unclear exactly whether he planned to interpret that information as a tale of Union moral victory. Lee had written that he appreciated that the purpose of the 1869 meeting was for "marking upon the ground by enduring memorials of granite the positions and movement of the Armies on the field," so it is apparent that

interest in the GBMA included "about 300 letters written."

⁴⁷ Clipping from the *Philadelphia Press* of a dispatch from Harrisburg, 14 March 1873, as quoted in Patterson, "From Battleground to Pleasure Ground." A statue of Meade was erected later in Philadelphia around the time of his death in the 1880s. The statue stands on the north side of Memorial Hall, which after serving as a central attraction in the Philadelphia 1876 Centennial Exposition became the city's art museum. The building now houses Fairmount Park administrative offices and the surrounding community has suffered serious decline. The statue faces an overgrown grove of trees and remains largely unknown and unnoticed by the "busy mass of men."

McConaughy envisioned a balanced presentation of the battlefield, even if few would have supported him in his efforts. Tourists to the field, while largely interested in the activities of the Union soldiers, also expressed interest in seeing the Confederate lines. The only way to get to these lines was if roads or lanes already happened to be in the vicinity, but none were yet constructed as part of the commemorative landscape.⁴⁸

By the late 1870s renewed interest in Gettysburg began to form for a variety of reasons. Lack of transportation had inhibited those who might have wanted to venture to the battlefield, and a nation recovering from war and suffering economic depression had also contributed to a decreased investment of energy and finances. Immediately after the battle a group of civic-minded men pushed to have the battle commemorated, not the soldiers themselves. Enmeshed in the experience of battle and the loss of comrades even years after the battle, the soldiers had not yet

⁴⁸ Popular accounts of post-battle experiences at Gettysburg suggested that people wanted to believe that the Southerners were simply under a delusion impressed upon them from their superior officers. As reporters explored the battlefield and the hospitals, they sought stories of Southern men expressing their appreciation for Northern kindness, which they had been told not to expect. In February 1864 the *Harper's New Monthly Magazine* published an account called "Four Days at Gettysburg" that presents the complexity of ideas about the South that existed during the war and would continue in the decades after the war, as well as the differences between civilian and soldiers attitudes about the "enemy": "Those who insist that there is a radical antagonism between the masses of the South and of the North; who maintain that so violently have the passions of the two sections been excited that it will be impossible ever to allay the exasperation and bring the people into good fellowship again, will find nothing on a battle-field when the conflict has ceased, or in the camp when quiet reigns along the lines, to justify their vehemently-supported postulate. The truth is, this war has shown to the people of each section the exact character of the other; has especially discovered to the ignorant masses of the South the true moral qualities of the North, and a mutual respect has been thus produced, out of which, in the future, there will grow inevitably that homogeneity that constitutes one of the surest safeguards, as it is one of the main pillars of strength, of a nation": 386-87.

reached the point where they could accept the sacrifices that they had made, let alone celebrate them. The families who sent off their men in parades and fresh uniforms in 1861 wanted to welcome home heroes in 1865 and sought the stories of war that would support their imagined experience of war. The realities of camp life, the terrors of combat, the narcotic effects of combat, siege, marches, hunger, and all the rules that governed a military life would not be fit conversation to relay to those who remained at home picturing a different reality. Some returned with wounds enough to illustrate the costs of war, but even these could be glossed over in a period of readjustment. In telling their experiences the soldiers began to be selective, letting some memories blend and blur and others fade away entirely. This process began even in the midst of the war. As soldier Daniel Crotty wrote as early as 1864, "as we look over the past, to most of us it seems [already] like a dream."⁴⁹

Only when the more painful and immediate memories had faded sufficiently could the soldiers join together to begin the process of commemoration. Rather than remain focused on death and mourning, the soldiers began to find a transcendent meaning in the cause for which they had fought and sacrificed. Reality became transformed into what one historian has called the "Myth of the War Experience," where sacrifice could be enshrined and used.⁵⁰ The creation of the battlefield park both focused the experience of war, providing a place to give meaning to loss, and trivialized it, subsuming the true experience of war into the collective memory of mythology. For years after the end of the war, many veterans chose to remain silent about their war memories, a reticence the public reinterpreted as "heroic modesty." Oliver Wendell Holmes, Jr., later a popular author and an associate justice of the U. S. Supreme Court, had been an early volunteer to the Northern cause, but by late 1864 had grown so bitter and disillusioned that he had resigned his commission. As the years of peace passed, Holmes transformed the veterans' collective silence into a core soldierly virtue. "Having known great things," he wrote in a passage widely cited among soldiers,

⁴⁹ Gerald F. Linderman, *Embattled Courage: The Experience of Combat in the American Civil War* (New York: The Free Press, 1987), 267.

⁵⁰ George L. Mosse, *Fallen Soldiers: Reshaping the Memory of the World Wars* (New York: Oxford University Press, 1990), 3-7.

"to be content with silence."⁵¹ Nothing could be more stoically silent than granite and bronze on a peaceful battlefield.

A separation developed between the civilians and soldiers after the Civil War, even as each group tried to erase and ignore the distance. The veteran had lost his youth, Bruce Catton explained; he had "come down to earth ahead of time. [Veterans] shared an understanding other folk did not have. Like Adam, they had been cast out of the enchanted garden, leaving innocence behind."⁵² Cast out of that earlier garden, in the 1880s the veterans of Gettysburg became more involved in the creation and development of the battlefield at Gettysburg. There they could create a new garden on their own terms, yet one also comprehensible to the public that had not shared their experiences.

The faltering fortunes of the GBMA in the 1870s happened to coincide with the rise of the Grand Army of the Republic (GAR). An association of veterans, the GAR was created in Illinois in 1866, around the same time of the creation of the GBMA. As the country sought to rebuild itself after the war, the flurry of interest that created many war-related organizations and memorialization projects, such as the GBMA and the GAR, faded from daily consciousness. Only as the Civil War veterans discovered that they had genuine concerns, such as obtaining veterans' pensions, needing help finding work, and readjusting to a peace time world that did not necessarily have sympathy for the years of youth they lost while serving the nation, did they begin to come together in organizations like the GAR. In the Grand Army, the harsher elements of war faded in celebration of heroes long since dead, as well as those soon to be lost through old age. What better way to bring honor to their own pasts than by honoring the lives of those who had fought beside them and perished?

⁵¹ Daniel G. Crotty, *Four Years Campaigning in the Army of the Potomac* (Grand Rapids, MI: Dygert Brothers & Company, Printers, 1874), 146, as quoted in Linderman, *Embattled Courage*, 268.

⁵² Bruce Catton, *Reflections on the Civil War* (Garden City, NY: Doubleday, 1981), 159, as quoted in Linderman, *Embattled Courage*, 275.

McConaughy had tried through the 1870s to keep interest in the battlefield alive and tried to shake loose the needed money from the budgets of the states involved in the conflict. But involvement remained local and the GBMA's grander vision unfulfilled. The turn-around of the fortunes of the GBMA came in 1878 following a reunion.

Ever since the Battle of Gettysburg, soldiers had surmounted the transportation difficulties and returned to explore the battlefield. Disappointing turnouts for the early reunions at Gettysburg gradually became successes as aging veterans took an interest in recounting the remembered glory and camaraderie of their war days. In 1878, the Pennsylvania GAR held its summer encampment at Gettysburg, covering the slopes of East Cemetery Hill for a week and reliving their army days. The veterans found the enthusiastic crowd and wandering the battlefield a pleasure. However, they also found that the results of the GBMA were sadly lacking and determined to remedy the deficiency. Unfortunately for McConaughy, as soon as his larger vision of the battlefield's development began to be fulfilled by the veterans, he was forced from a prominent role in the GBMA. McConaughy all but disappears from the records of the GBMA, his name appearing in the association minutes only as a cause of conflict when the GBMA members tried to claim the association's records from him.⁵³

The transferal of power of the GBMA from local non-veterans to predominantly GAR members was surprisingly easy to negotiate. The association's original charter did not limit the number of shares that it was allowed to issue, so members of the GAR quickly gained control of the organization simply by purchasing one hundred shares and sending representatives to Gettysburg for the 1880 annual meeting to vote on their behalf.⁵⁴

With the control of the GBMA evolving to the Unionist-minded GAR, so too did the commemorative efforts on the battlefield. The revamped GBMA recognized that the source of interest in the battlefield would most likely come from GAR members like themselves and openly appealed to the Union men to aid the

⁵³ Since so few records remain from McConaughy's years with the GBMA, the effort of the GBMA appears to have been unsuccessful.

⁵⁴ Kinsel, "From These Honored Dead," 174-75.

field's development. In a formal 1883 "Address of the Gettysburg Battle-Field Memorial Association," the directors of the GBMA pleaded for assistance from "patriotic citizens" from across the country, but most heartily appealed to veterans. "Especially we desire the sympathy and efforts of the Grand Army of the Republic in its [the GBMA's] behalf," they wrote. "Very many of our stock-holders and officers belong to that organization and we should be very glad to receive a large increase of membership from their ranks."⁵⁵ With the transfer of the GBMA from local interests to the patriotic GAR, however, avenue and memorial construction increasingly emphasized Union positions and the Northern victory. Until the late 1880s, the 1869 reunion remained the only formal attempt to mark the Confederate sections of the battlefield.

It seems that much of the work in the takeover of the GBMA by the GAR was orchestrated by John M. Vanderslice of Philadelphia.⁵⁶ Vanderslice's first known association with Gettysburg came in 1877 when he delivered a Memorial Day Address, the first non-Gettysburg resident to do so. He began to plead the cause of commemorating the battlefield by pointing out to veterans that their numbers were dwindling, calling upon the same sentiments that were bringing more and more veterans to join GAR posts across the country. "How rapidly our ranks are thinning out," he said, "How soon our beloved order shall live only in history ... how soon the last veteran shall be mustered out."⁵⁷ The dwindling number of veterans, however, was not reflected in the

⁵⁵ *Address of the Gettysburg Battle-field Memorial Association, Its Organization, Plans and Purposes, with Map of the Battlefield*, Pamphlet, 1883, GNMP - Archives.

⁵⁶ It is unclear whether Vanderslice was a veteran of the Gettysburg battle. He later became the author of two books about the GBMA, seeking to preserve the role of the organization in the creation of the battlefield as it began to take on more national significance and control transferred to the War Department. The book titles are *Gettysburg, A History of the Gettysburg Battle-field Memorial Association*, (Philadelphia: The Memorial Association, 1897) and *Gettysburg, Then and Now, the Field of American Valor*, (New York: G. W. Dillingham Co., 1897).

⁵⁷ *Gettysburg Star and Sentinel*, 7 and 14 June 1887, as quoted in Patterson, "From Battleground to Pleasure Ground."

numbers joining the GAR. At the time of the Gettysburg encampment in 1878, GAR membership stood at 30,000. By 1884, when the control of the GBMA was firmly within the control of the veteran organization, the numbers had jumped to 233,000. When the GBMA had reached the peak of its activity in 1890 and was looking for ways to take care of the commemorative landscape that they had created, GAR membership also peaked at 428,000 members.⁵⁸

The new membership of the GBMA took over operation of what it saw as an underdeveloped landscape. They acknowledged the initial efforts of McConaughy and others to be noble and vital to the survival of key points of the battlefield, but also criticized them as slow and ineffective in carrying out their goals. In an effort both to generate more money and interest in the battlefield and to boast of their efforts, the Memorial Association offered its members regular progress reports, presenting a balance of what they had achieved with what they hoped to accomplish. Keeping members informed of activities and simply keeping records of the association led the park to a level of professionalization that had not existed in the previous administration, regardless of how good its intentions had been to serve greater public interests.

During the 1878 reunion, two Pennsylvania GAR posts placed the first two modest commemorative markers on the battlefield, one on Little Round Top and the other on Round Top, each to honor a fallen officer. These were soon followed by the erection of the first regimental monument by the Twentieth Massachusetts Volunteer Infantry. The veterans placed their rectangular monument on a large Gettysburg granite boulder in Spangler's Meadow, at the border of a small patch of woods and an open swale that characterized the landscape during the battle and at the 1879 dedication. Although they were not seen as representing larger plans for the battlefield at the time, placing these monuments became, in retrospect, the beginning of a dedication on the part of the veterans to transform the field into a fitting memorial to the individuals and regiments who fought there. Prior to the placement of the new memorials, all that had existed

⁵⁸ Linderman, *Embattled Courage*, 275.

on the landscape were the remains of lunettes and breastworks and crude markers indicating only the movements of the armies.⁵⁹

Before the association could push for the erection of more monuments, it realized that it needed to obtain more land and to open new avenues. When the newly reorganized GBMA convened, one of the first items on the agenda was to create a "committee with authority to repair and place in good order the roads on the grounds of the association." Exactly what roads were already available to the public is not clear, but whatever was there was in need of maintenance. Also lacking were signs noting the positions of troops on the field, so the committee promptly ordered fifty boards prepared for lettering and placement on the field.⁶⁰ In its first published public address, the executive committee listed the land already in the possession of the organization and what other lands it felt were vital to the development of the battlefield. Once the association had the land, it determined it "exceedingly desirable to have proper avenues laid out and constructed along the whole line, so as to afford easy access to, and a full view of, every portion of this historic ground." In the meantime, to aid visitors in studying the field, the association built a wood observatory on Cemetery Ridge that offered a panorama of the battlefield for many miles and "afforded a connected view of various parts of the field." The tower was to be 16' x 16' at its base and 8' x 8' at the top and 60' in height, with a foundation of stones and a superstructure of timber frame and boards, and with a tin roof and flights of stairs leading to the top with floors at intervals of 10-12', at a cost of \$1,000. While avenues required significant money and manpower to build and maintain, an observatory offered immediate rewards for the association and visitors, an advantage that the next administrative body to tend the park would also use nearly fifteen years later when it too erected towers at key points on the battlefield.⁶¹

⁵⁹ Vanderslice, *Gettysburg, A History of the Gettysburg Battle-field Memorial Association*, 197-211.

⁶⁰ 2 and 9 July 1880, GBMA Minute Book, GNMP - Archives.

⁶¹ *Address of the Gettysburg Battle-field Memorial Association*. The 1883 *Address* of the GBMA implies that the observation tower was recently constructed, but a record from the Adams County Courthouse shows that it was contracted on 20 March

To the GBMA the purpose of creating a system of avenues was to open sections of the battlefield previously not reachable by any but the most adventurous of visitors, and certainly not by carriage. The association began to take advantage of the land condemnation clause in the 1866 enabling legislation supplement when it sought to acquire land central to the battle or for the erection of monuments. Some monuments required only small, isolated parcels of land, but acquiring such parcels demanded much time and energy to negotiate. Whenever possible the association acquired strips of land large enough for road access as well as for the erection of monuments along the battle lines, as determined by the GBMA. The negotiations and deeds acquiring these lands became extremely complicated and prevented the later Gettysburg Park Commission from ascertaining how much land it controlled.

By 1881 the legislature of Pennsylvania had approved \$10,000 towards the work of the association, allowing it to make noticeable strides in developing the battlefield. This was, the executive committee reported with evident pride, the first state appropriation for park expansion and improvements since 1868.⁶² The GBMA constructed a carriage road over Little Round Top and a walking path to the summit of Big Round Top, where an observatory "affording extended views of extraordinary interest and beauty" awaited visitors. Corporal Skelly Post No. 9 GAR erected the observatory, which meant that the GBMA did not have to deplete association funds for its construction.⁶³ The association also acquired land for a 2 mile avenue from the National Cemetery to Little Round Top, with its width varying from 60' to 300'. While the association had determined the line of the avenue and obtained the necessary 27 acres of land, awaiting future funds were the "construction of a good carriage road and foot-passenger road along this line." What the association meant by "good

1878, so it is unclear if it is the same tower. Mechanics' Liens, Adams County Courthouse, Gettysburg, 490. Transcription in Vertical File #901, GNMP - Archives.

⁶² The committee during these early years was made up of Robert G. McCreary, J. L. Schick, C. H. Buehler, N. G. Wilson, J. M. Krauth, Charles Horner, and Robert Bell.

⁶³ *Star and Sentinel*, 19 August 1890. This tower was removed in 1890 when the GBMA declared it unsafe.

carriage road" is not clear, but the organization's minute book showed a distinction between "well-drained and McAdamizing where necessary" and whatever was passable as a good road under normal conditions.⁶⁴ The GBMA preferred wide roadways deserving of the name "avenue," and constructed the 22' wide roadway including ditches from Taneytown Road to Little Round Top. That preparing a macadamized road cost more is apparent from the association's specification to the builder that the necessary macadamized sections be no wider than 16'. Likewise, those sections that had along the proposed line rocks too expensive or too large to remove were to be made "sufficiently wide for large teams to pass with safety."⁶⁵

By December 1882 the GBMA's annual report once again announced that it had depleted all of its funds, but was proud to report what the year's allocation of funds had procured. Acquiring land and constructing avenues dominated their expenses. With the purchase of land on the east and south of Culp's Hill, including Spangler's Spring, land on the east and south slopes of Round Top, and the Wheatfield and the woods south of it, the lands under the care of the GBMA had grown from 150 acres the previous year to 280 acres.⁶⁶ The lands, the executive committee claimed, were under threat from other potential uses, including farmers altering the nature of their farms and commercial development. During the year 2 miles of avenue along Cemetery Ridge to Round Top were also constructed, and the whole was enclosed with steel-barbed wire and locust post fence.

Integral to the avenue plans, particularly because they would have to discriminate between association and private land, were arrangements for fences along the avenues. Part of the arrangement with property owners when the GBMA purchased rights-of-way to lay out and construct the avenues was that the association would erect sturdy fences to protect the farmers'

⁶⁴ Report of the Executive Committee of the Gettysburg Battle-field Memorial Association, 22 December 1881, GNMP - Archives.

⁶⁵ 25 April 1882, GBMA Minute Book, GNMP - Archives.

⁶⁶ The GBMA counted the lands of General Crawford as its own because it oversaw the property for the General, who was also a member of the association.

livestock. The association turned to the Washburn Manufacturing Company of Worcester, Massachusetts, for the sturdiest fence available. The fence was made of Brinkerhoff Patent Metallic galvanized wire, with the bottom three strands of barbed wire and the top two unbarbed, attached with hooks and staples to locust posts.⁶⁷

The fence became closely associated with the GBMA and appeared around monuments as well as along the avenues. The association was proud of its sturdy new fence, but its design served the agricultural needs of the community more than any ornamental preferences the association may have had. Some of the regimental associations opted to construct their own fences around their monuments, usually of wrought iron. Two monuments in front of the Sherfy farm on the Emmitsburg Road, representing the Fifty-seventh and 114th Pennsylvania Infantry, have surviving examples of this type of fencing. Delicate loops of iron attached to sturdy, pedimented corner posts were characteristic of nineteenth century fencing and survive as a decorative element from the GBMA era. In contrast, the barbed wire appears unintentionally in photographs of the period as a subtle background feature meant to protect the material resources of the park rather than to enhance the park's natural or commemorative setting.⁶⁸

When the GAR-oriented members took over the direction of the GBMA they were also quick to define what it found to be acceptable behavior and activities on the battlefield, readily eradicating those that did not reflect the patriotic aims of the association and those that threatened the sanctity of the battlefield. One of the first acts of the GBMA was to force the removal of a dance hall on Culp's Hill, while at the same time declaring all peddling, huckstering, refreshment stands, dance halls, and exhibitions forbidden on GBMA grounds.⁶⁹ In lieu of refreshment

⁶⁷ 22 December 1881 and 24 February 1882, *GBMA Minute Book*, GNMP - Archives; Report of the Executive Committee of the Gettysburg Battle-field Memorial Association, 28 December 1882, GNMP - Archives.

⁶⁸ *William Tipton Stereo Photograph Catalogue*, Adams County Historical Society, Gettysburg, Pennsylvania.

⁶⁹ 19 July 1879 and 22 June 1881, *GBMA Minute Book*, GNMP - Archives.

stands to provide for tourists on park grounds, the association decided to have a well dug "at a suitable location in the vicinity of Round Top, for the accommodation of visitors to the battlefield," preferring the availability of water over other questionable forms of liquids. The GBMA often wavered on this issue, but most often returned to its policy of not encouraging commercial interests on association property. Photographers were allowed to ply their trade, but for a fee, only in designated locations, and only if the "artists [had] served in the Union Army." Whenever possible the association hired Union veterans to do whatever work needed to be done on the battlefield, whether surveying the avenues or the heavy manual labor of moving boulders.⁷⁰

The defining year for the GBMA was 1883, as it reached out to the general public to make its intent and funding needs clear. In the *Address of the Gettysburg Battle-Field Memorial Association, Its Organization, Plans and Purposes, with Map of the Battlefield*, the authors laid out two interconnected objectives of the association. These objectives pushed its purposes beyond "holding and preserving the battle grounds of Gettysburg, with the natural and artificial defenses thereof," the principal goal of the 1864 legislation, by adding emphasis to the clause "with such memorial structures as might be erected thereon in commemoration of the heroic deeds and achievements of the actors therein."⁷¹ By carefully editing the wording of the original legislation, the GBMA downplayed the involvement of the public in selecting what monuments should be erected. The GBMA now interpreted its duty as creating and preserving both a *history* and a *park*. The grounds were no longer only a "battlefield," but had come to represent an event of the past that demanded and deserved both commemoration and beautifying. "If the enlargements and improvements designed and suggested can be

⁷⁰ 13 October 1881, *GBMA Minute Book*, GNMP - Archives. The minutes request that a survey for a proposed avenue be made, with "said assistants to be ex-soldiers of the Union Army if they can be obtained."

⁷¹ The original reads: ". . . with the natural and artificial defences, as they were at the time of said battle, and by such perpetuation, and such memorial structures as a generous and patriotic people may aid to erect, to commemorate the heroic deeds, the struggles and triumphs of their brave defenders."

carried into effect," the GBMA promised, "we shall have preserved, for the contemplation of the military student and tourist for future years, a history, delineated upon the ground, of the most important battle of modern times; and shall also possess a Park, the diversified and striking beauty of which can hardly be excelled."⁷²

The same year that the GBMA produced its document relaying its accomplishments to its members, it also published an "Address to the American People." This address, meant to generate support and interest in the field from the general public, was published complete with a written account of its aims and a map of "Gettysburg and Vicinity," showing the association's lands in color. The pamphlet compared individual state's contributions to the association with each state's involvement in the battle, according to numbers of regiments of infantry, cavalry, and batteries of artillery. The pamphlet clearly intended to show the imbalance of state battle participation with state financial contributions. Minnesota, with only one infantry regiment at Gettysburg, had appropriated \$1,000.00 to the GBMA in 1873, which the GBMA declared a "liberal and generous donation." In light of the monuments already in place on the battlefield and states that had contributed to preserving Gettysburg, the GBMA noted that the "example of these organizations will undoubtedly be followed by others from States whose troops participated in the battle."⁷³

State participation in the battlefield was crucial for future avenue development. In its address the GBMA noted the reluctance of farmers to sell small plots of land in the middle of their farms; farmers understandably did not relish the idea of visitors to the isolated plots stomping their crops or interfering with grazing animals to get close to the monuments, especially in the areas of the heaviest fighting and with a higher potential for monumentation. The decision to acquire only strips of land for

⁷² Address of the Gettysburg Battle-Field Memorial Association, 1883, GNMP - Archives.

⁷³ Gettysburg Battlefield Memorial Association, Its Organization, Plans and Purposes, with Map of the Battlefield, 1883, privately printed by the organization in a lot of 1000 copies, Van Pelt Library, University of Pennsylvania, Philadelphia. This publication underwent subsequent editions showing the additions to the park, but this was the first effort.

monuments, then, was as much an economic decision as a preference. While today it may seem odd that the association sought to purchase only strips of land rather than entire areas, its limited funds made even such expenditures as the right-of-way for avenues a costly commitment. The association announced that it was its "duty ... at the earliest practicable moment, to lay out additional avenues and drive-ways traversing the main lines of battle, and to secure the right-of-way" before it could continue to encourage or aid in the further monumentation of the landscape. By this time the pattern had been well established that the GBMA supplied the lands and roads, while the states, veterans, and others interested in memorializing the battle provided the funds and monuments."⁷⁴

Some of the same practical sentiments that had motivated McConaughy when he first purchased land for the association continued to motivate the later members of the organization. The 40 square miles of land on which the battle had been fought was rapidly changing and the association had only limited claims and thus no control over what happened to the other sections of the battlefield. The association had set itself up with a formidable task but was also determined to see that what it deemed as "points of historic interest" were preserved. "Properties are changing hands," was the association's position on the evolving nature of the land around Gettysburg. Not only had the landscape already changed, but also the association was wary of the inevitable changes that the future would bring, with "woods liable to be leveled, houses erected, fences changed, stone defenses removed, and other improvements made that would destroy the historic characteristics of the field."⁷⁵

In its appeal to state governments and to the public for financial support, the GBMA also turned to key words of Abraham Lincoln's "Gettysburg Address." The final sentence of its evocatively-titled "Address to the American People" concludes with a reminder that the battlefield was to be "a perpetual memorial to the patriotism and courage of the heroes who there gave their lives that the nation might live," altering the word "here" for "there." For anyone of the time familiar with the

⁷⁴ Kinsel, "From These Honored Dead," 181.

⁷⁵ *Gettysburg Battlefield Memorial Association, Its Organization, Plans and Purposes, with Map of the Battlefield.*

address, the next line of the speech would flow directly from their tongues: "It is altogether fitting and proper that we should do this," implying that all who read the GBMA's address should want to contribute to the even broader enterprise of supporting and dedicating the battlefield, rather than stopping at the consecration of the cemetery, where Lincoln's famous words were delivered.

The campaign to generate interest in Gettysburg clearly had its intended effect. The years between 1883-88, the twenty-fifty anniversary of the Battle of Gettysburg, saw a burst of activity on the battlefield in land acquisition, avenue construction, and monumentation. By 1887 the GBMA had significantly added to its land holdings and avenues. The Smith Granite Company of Massachusetts had clearly already profited from the expansion and monumentation of the field when it published its 1887 map, "The Gettysburg Battle Ground, Showing Location of Monuments." In addition to highlighting the monuments that the granite company had constructed, the map tied the proliferation of monuments with those areas where avenues were opened on the battlefield. The GBMA had opened at least some sections of avenues along the Union lines on each day's field of fighting. Although the avenues did not begin to receive their names until November 1887, most of the avenues affiliated with Union activities were firmly in place. Despite later alterations in many of the avenues' alignments by both the Gettysburg Park Commission and the National Park Service, key points in the battlefield received their stamp of identity by these early efforts of the GBMA.⁷⁶

After opening an avenue along the main Federal line of battle on Cemetery Ridge, in 1882 the association voted in the same year to open an avenue across Culp's Hill. The avenue along the ridge later became, from north to south, Hancock, Sedgwick, and Sykes Avenues, and the second encompassed the general vicinity covered by Slocum and Colgrove Avenues, entering and exiting on the Baltimore Pike. In 1882, the GBMA also proposed opening part of what later became Sickles Avenue, "from the Devil's Den around the 'Wheat Field' to the Emmitsburg Road by the 'Peach Orchard.'"⁷⁷ By 1884 the GBMA expanded its interests to include

⁷⁶ For details of the dates, construction, and evolution of the avenues, please see the appendix attached to this report.

⁷⁷ 27 July 1882, GBMA Minute Book, GNMP - Archives.

the first day's battleground, opening an avenue from the Hagerstown Road to the grove of trees where General Reynolds was killed, across the old railway cut, and along part of Oak Ridge. The GBMA had in 1881 proposed opening a 60' avenue north of the wall of the National Cemetery, from the Baltimore Turnpike to the Taneytown Road, and in 1885 they put forth the same proposal. The avenue seemed expedient because there was no other access in the immediate vicinity directly connecting the avenues on Culp's Hill and along Cemetery Ridge. The War Department, who administered the cemetery, opposed the plan.⁷⁸

Perhaps it is not coincidental that Nicholas G. Wilson, who was superintendent of the National Cemetery and also active in laying out the roads for the GBMA, was singled out in the minutes at this time. The GBMA offered Wilson its "cordial thanks" for the "large amount of time and attention given by him to the opening and construction of avenues." By the following year many of his duties were shared by John M. Krauth, and in 1887 Wilson resigned his post as superintendent of the National Cemetery and was hired as Superintendent of Grounds for the GBMA at \$1,000 a year. Upon his death in 1907 a local newspaper credited him with doing "the real work of association on the field," including building most of the avenues under the GBMA.⁷⁹

Howard Avenue, surveyed in 1886 on the line occupied by the Eleventh Army Corps, was so new that the later abundance of monuments it acquired had not yet appeared on the 1887 Smith Granite Company map. The avenue, which appears north of Gettysburg connecting the Harrisburg Road to the Mummasburg Road and crossing the Carlisle Road, was completed by the summer of 1887. The avenue underwent more public controversy than most in determining its name. The Eleventh Corps gained notoriety in the

⁷⁸ The GBMA first proposed opening the avenue north of the National Cemetery wall on 29 July 1881 and proposed it again on 16 June 1885, *GBMA Minute Book*, GNMP - Archives; Vanderslice, *Gettysburg, A History of the Gettysburg Battlefield Memorial Association*, 225.

⁷⁹ 11 August 1885, 25 February 1886, and 16 September 1887, *GBMA Minute Book*, GNMP - Archives; "A Soldier Mustered Out Who Did the Early Work of Developing the Battlefield," *Gettysburg Compiler*, 11 December 1907, *Gettysburg Newspaper Clippings*, vol. 5, 82.

battle for being routed and almost losing the battle, for which the corps blamed their leader, General Oliver O. Howard. When the GBMA determined to name the avenue Howard Avenue, the corps protested that it should be named Eleventh Corps Avenue in honor of the men, not the officer in charge. Even newspapers referred to the avenue by the corps' preferred name. The head of the Gettysburg Memorial Commission of Ohio wrote to the GBMA that "this Commission respectfully but most earnestly protest against the adoption of Howard Avenue as the name of that thoroughfare."⁸⁰

The Smith Granite Company map also highlights a particular roadway that does not appear with such definition on other maps. Weikert Lane on the map is noted as if it is an avenue, but if it was ever regarded as such, the park must have abandoned it as a potential avenue. The roadway appears north of the point where Crawford Avenue heads south off Wheatfield Road into the Valley of Death, through a grove, and curves east towards the junction of Hancock and Sedgwick Avenues. Emmor B. Cope's map of crops known to have been in the area at the time of the battle highlights a lane following the same alignment past the J. Weikert farm.⁸¹ While the avenues were still in this early stage of development, many farm lanes, particularly in the middle of the areas of heaviest fighting, were likely used by visitors to access the field and could have been charted for expansion. The number of monuments clustered along the south end of the lane today highlights the area's importance for a number of volunteer regiments. Not yet visible on the map but in discussion at the time of the map's publication was the purchase of Meade's headquarters and a short avenue near the site linking Taneytown Road to the main avenue.

Plans for and the construction of other avenues followed in close succession, in anticipation of the twenty-fifth anniversary of the battle and then out of the momentum generated by the event.

⁸⁰ 3 July 1888, *GBMA Minute Book*, GNMP - Archives. The debates, politics, discussions, and arguments over the naming of the avenues is worthy of more study in what they reveal about how and what officers were remembered on the battlefield.

⁸¹ Emmor B. Cope, "Cope Crop Map," c. 1890, crop patterns inked on reduced versions of the Major General G. K. Warren "Map of the Battle of Gettysburg," 1868-69.

By the end of 1888, the GBMA had surveyed and constructed Wright Avenue to reach from the Taneytown Road through the Round Tops, determined the layout of Neill Avenue east of Rock Creek, and proposed the first avenue on East Cavalry Field along General Gregg's cavalry line, in addition to extending to other sections of roadway and filling in existing avenues. The GBMA also planned avenues around the Peach Orchard, across Powers Hill, and from Round Top to the Emmitsburg Road. The access for Powers Hill was never formally completed and was later abandoned, and the other two, later known as Birney and South Confederate Avenues, did not appear until after the War Department took over the field. After the reunion the GBMA plotted a footpath along the line occupied by Brooke's Brigade near the Rose Farm, opened a roadway to the Custer monument on East Cavalry Field, opened Buford Avenue west of Oak Ridge, extended Sickles Avenue north of the Wheatfield Road, created Ayers Avenue "along the line of monuments of McCanless' Brigade of Pennsylvania reserves," and created Pleasonton Avenue leading from the Taneytown Road to Hancock Avenue. Wherever a line of monuments was planned for or already graced the field became a potential site for an avenue.

During the GBMA period of avenue development, there were few significant engineered elements to the roadways. The largest element added to the road system was an iron bridge crossing the railroad cut. At the time of the battle on 1 July 1863 the railway cut was an open trench, up to 20' deep. The cut had been dug thirty years before as an early railroad venture for the Tape Worm Railway and then abandoned. During the battle, however, it offered one of the few Union victories of July 1. Union fire forced the Confederates into the railroad bed, where the protective dirt walls offered a good defensive position until the Union troops fought their way to the embankment and trapped the Confederates within the trench. As a part of their efforts to open an avenue along the first day's battle, later known as Reynolds Avenue, the Gettysburg Battlefield Memorial Association contracted with Gilbert and Smith of Gettysburg for a wrought and cast-iron Pratt Truss Bridge over what was then known as the Hanover, Hanover Junction and Gettysburg Railroad. Constructed in 1886-87, the bridge spanned 49', rose 18' above the railroad bed, and had a 14'-wide oak-planked roadway. The GBMA thought that the iron structure, with its substantial masonry abutments resting on a rock foundation, would be of sufficient strength and

durability to bear all ordinary horse and carriage travel of at least 75 pounds per square foot.⁸²

A less technical and less expensive engineering addition to the early avenues came out of a need to protect the avenues from water run-off. The association had early determined that its avenues would need ditches to aid drainage and that some sections would need to be macadamized, such as noted in the construction of sections of Hancock Avenue. Although the meeting minutes do not record how the association put its idea of this road treatment into practice, sources of the time recommended placing drains or pipe drains either on the sides of the road or, if the area was particularly wet, underneath the center of the road. It was also recommended that the land around the roadway be graded so as to prevent water spilling over onto the road. Key to the macadam road was a base layer of broken stones (gravel), which were supposed to be of good quality, with no more than 1/4 part sand or clay and with stones no larger than 1" in diameter. The base was recommended to be 6" deep, with another 6" deep layer of screened gravel on top, with the total thickness of the road surface being 10" to 12". The road surface was then compacted by the use of a steam roller.⁸³ The avenues traversed into low wet areas where battle activity had been thick, so it is difficult to know how extensively the GBMA turned to the more expensive method of macadamizing.

Maintaining the roadways must have been a challenge and required either a lot of hand labor or the use of borrowed machinery up until 1887. It was not until July of that year that the GBMA purchased a "road machine to be used for the construction and maintenance in good order of avenues and driveways." Photographs of the avenues taken from the 1880s through the early 1890s reveal the rather haphazard efforts of the GBMA and many of the avenues can only be identified by the monuments as landmarks. Minimal ditches lined the roadsides and people freely left the designated roadway for a clipped curb or a closer look at a monument, even within the limited avenue right-of-way. The

⁸² 25 February 1886, *GBMA Minute Book*, GNMP - Archives.

⁸³ N.S. Shaler, *American Highways: A Popular Account of Their Conditions and of the Means by Which They May be Bettered*, (New York: The Century Co., 1896), 131-143.

resulting roads varied from wheel-rutted sandy paths to stretches of avenue that would have been fine on an early summer day.

The avenues did not include curbs or provide areas to hitch horses, but the large variety of fences limited where people could ultimately take their carriages, forcing them to remain within the bounds of the avenues. In addition to the locust post and barbed wire fence securing GBMA property, fences in the general vicinity included post and rail, Virginia worm, stone and rider, stone, picket, and other types of barbed wire fencing.⁸⁴ Prior to the erection of monuments, many regiments marked their positions on the battlefield with tall iron signs that looked much like Victorian street signs, with pedimented tops framing a small rectangular white sign, with black letters. The post was likewise decorative. Many appear in the GBMA photographs, but only a few close enough to read, such as the marker for the Seventy-sixth New York Volunteers. The Twentieth Indiana Volunteers, on the other hand, seemed to have marked their position on the field with only white paint on a piece of dark slate until they could erect their monument. The GBMA placed few other signs on the battlefield. The monuments, once erected, were meant to serve as silent interpreters of the field.⁸⁵

Even if the avenues were not necessarily constructed using the latest in road-building technology, the money, time and labor to open and maintain the avenues was significant enough that the

⁸⁴ The GNMP Archives holds a large number of photographs of the development of the battlefield, many of which were taken by William Tipton. Anyone wanting access to these photographs should contact the National Archives, where the originals and many of the negatives are housed. Many photographs from the GBMA period are also available at the Adams County Historical Society in the form of the books Tipton used to sell stereocards to the general public. Tipton was a local photographer who took thousands of photographs of the battlefield over several decades, tracing Gettysburg's development from small lanes to a fully realized commemorative landscape.

⁸⁵ "The 76th New York Infantry Monument, Reynolds Avenue," photograph #980, page 54; "The 20th Indiana Infantry Monument, near Wheatfield," photograph #893, page 65, *William Tipton Stereo Photograph Catalog*, Adams County Historical Society, Gettysburg, Pennsylvania.

association soon had to establish rules for their use. The public's use of the roads implies that even if the roads were unpaved and minimally drained, they may still have been preferable to the local roads. A few years after beginning avenue construction in earnest, the GBMA decided to place signs at the end of the avenues "notifying all persons that teams for hauling lumber, materials, and produce will be prohibited."⁸⁶ The appeal of the avenues and GBMA property for all uses and types of people had apparently attracted enough attention that some sought to profit by advertising upon the landscape itself. In addition to other restrictions limiting use of the property, the GBMA soon had to warn against advertising on its land.

More efficient passenger train service in the 1880s eased the journey for visitors to the field, making what had been a pilgrimage a holiday jaunt. Veterans who wished to see Gettysburg again could suddenly make the trip. Thousands made the journey, particularly for the dedication of their regimental monuments. Plenty of carriages were available for hire from the town of Gettysburg, with a battlefield guide also for hire. The quality, length of the tour, and cost of the guides varied and were not regulated, so even though many veterans of the battle survived, giving tours was a lucrative business and attracted many who feigned their knowledge. Aside from privately published guidebooks, there were no official tours of the battlefield. Many who visited the battlefield in the early years would have accompanied someone who had either fought in or was familiar with the battle. During reunions the men stayed on the battlefield in tents, but visitors to the town were likely to stay at one of the hotels or boarding houses and take their meals in the borough, since nothing was officially available on the field.

John B. Bachelder, the official government historian of the Battle of Gettysburg, epitomized the reactions of visitors and those familiar with the battlefield. Bachelder's involvement with the battlefield spanned from immediately after the battle when he arrived to talk to the soldiers, until his death in 1894 shortly after being named to the Gettysburg National Park Commission. He also bridged the various administrations at Gettysburg, participating in some way with each administration, including both incarnations of the GBMA. By 1873 Bachelder had produced a guidebook, *Gettysburg: What to See and How to See It*,

⁸⁶ 24 June 1884, GBMA Minute Book, GNMP - Archives.

which underwent nine editions by 1889. The new editions, however, always took into account what the landscape had been, and how subsequent additions altered the battlefield experience for visitors. Unlike most guidebooks, Bachelder's was particularly aware of how the addition of the avenues altered perceptions of the battlefield and methodically pointed out what was new and where. His ulterior motive seems to have been to advertise his "Isometrical Drawing" of the battlefield, which he made in 1863. A prime motivator in many of the commemorative changes in the battlefield, he pushed his drawing as a way for visitors to monitor for themselves what survived of 1863 in the landscape.

At the opening of his ninth edition, Bachelder called immediate attention to the avenues that had begun to traverse the battlefield landscape. "At the time the battle of Gettysburg was fought," he wrote;

[T]he lines of battle ran across the country regardless of roads, and often led through unfrequented localities, which were nearly inaccessible to the visitor until the Battle-field Memorial Association opened new driveways to them. Hence in time the new and old would have become confounded. Fortunately, the author commenced a careful isometrical sketch of the field at once and completed it... before any changes in the topography had been made--before new roads were built, or houses erected.⁸⁷

Bachelder saw the reasoning behind the construction of the avenues as an aid to the aging veterans more than for tourists to the field. Soldiers were most interested in those places where they fought, which took them to remote parts of the field not accessible by public roads. "Each year the veterans are less able to visit these spots on foot," he reasoned, and the GBMA "determined to make such changes and improvements in the grounds as would not only locate exactly the various regiments on the Union side that took part in the battle, but would make access to these localities as easy and convenient as possible." For Bachelder, the reasoning behind the construction of avenues was not only for protection of the field but also for the study of

⁸⁷ Bachelder, *Gettysburg: What to See, and How to See It*, iii.

the landscape, first by those who had fought on the ground, and second for future study.⁸⁸

While Bachelder appreciated the service that the avenues provided, he preferred exploring the battlefield as if it was still a wild land. "Unquestionably the pleasantest and best way for those accustomed to the exercise," he wrote, "is to secure a saddle horse, as very many places can thus be examined which would never be visited with a carriage." The battlefield was to be experienced, and Bachelder offered advice on everything from what clothing and footgear to wear as well the significance of seeking out even the wildest spots. Many of the locations that he suggested do not appear in visitor guides today, including the banks of Marsh and Rock Creeks and Willoughby Run. Bachelder feared that so many "radical changes" had taken place on the battlefield in the years since the battle that even "the veteran who fought over [the field], and who has carried the picture of it in his memory for years, will be confused at the sight of unfamiliar paths and avenues; with the multitude of monuments which dot the landscape; with the smooth lawns and luxuriant growth of foliage and flowers, where once the scant grass hardly covered the sterile soil."⁸⁹

In general, Bachelder guided his imagined readers as two separate groups, offering the newcomers field advice for how to approach each area on the most "wild and picturesque routes" and the veterans according to the landmarks that might be familiar to them. His route encompassed fields, paths, farm lanes, public roads, and the avenues, seeing the battlefield as an entire experience that one should spend days exploring. He pitied those who scheduled only enough time for a brief visit, and suggested that they climb cupolas and towers for their quick study. One should not, he determined, depend upon the National Cemetery as a point to study the field. Whereas once it "afforded an unobstructed view of the almost the entire field," at the time of his writing it contained "beautiful shrubbery at the expense of a magnificent landscape view."⁹⁰ Overall, Bachelder held a romantic view of the battlefield and guided his readers to take

⁸⁸ Ibid., 22.

⁸⁹ Ibid., 17, 21.

⁹⁰ Ibid., 98-99.

in the sites as observed from the roughest spots to the most gracious hotel verandah.⁹¹ The woodcuts illustrating the field showed a lavish landscape of mysterious waters and groves of virgin timber securing the secrets of the battle, making Gettysburg equal to any parkscape in America in the last quarter of the nineteenth century.⁹²

For a complete study of the battle, Bachelder, like an increasing number of GBMA members, recommended study and marking of the locations where the Army of Northern Virginia held their positions. Significantly, by the mid-1880s the GBMA began to consider developing the Confederate sections of the battlefield, a debate that reached a crisis in May 1886. The Second Maryland (CSA) erected a monument on Culp's Hill, which some Northerners welcomed but others greeted with ill-will. "The erection of an ex-Confederate monument within the Union lines raises an important precedent," noted the GBMA minutes for 7 May. The problems presented were so complicated that "the resident members of the committee were unwilling to assume the responsibility of deciding it" and put off the decision for another time. Maryland's Confederate veterans prided themselves on being the first Southern state to erect a monument at Gettysburg and doubtlessly thought that others would soon follow. In placing their monument, the regiment declared, "All [the war's] bitter memories ought to be buried, and only those noble deeds remembered which are a credit to manhood."⁹³

⁹¹ Ibid., 36, 115.

⁹² As the official government historian of the Battle of Gettysburg and the acknowledged expert of the conflict, Bachelder assumed a significant role in determining what land the GBMA should purchase for avenues and where to place monuments. He "shaped the appearance and spirit of the field as a memorial in a critical period of its development." Kinsel, "From These Honored Dead," 183.

⁹³ "The Maryland Confederate monument at Gettysburg," *Southern Historical Society Papers XIV* (Jan.-Dec. 1886): 434-435. In placing their monument at Gettysburg the Maryland regiment was also declaring that their needs as aging soldiers could only be helped by compassionate Union soldiers. Three days before dedicating the monument in Gettysburg the regiment met in Baltimore for a preliminary meeting, at which General Bradley T.

Those who had long made a study of the battle a passion, a hobby, and a way of life welcomed Confederate monumentation and Confederate lines marking. The issue was what exactly the battlefield was commemorating: Union or national interests. By February of the following year the members of the executive committee that lived in the area began to "inquire without delay the price of so much land as will be needed to open an avenue sixty feet in width along the general line occupied by the Confederate position from the Hagerstown Road to the Emmitsburg Road." By September 1889 the GBMA began to realize that decision to open avenues along the Confederate lines was something more than they could do themselves, and noted in its records:

It is the sense of this Association that the Congress of the United States should be requested to purchase such land as may be necessary to open avenues and driveways along the whole line of battle occupied by the Army of Northern Virginia, during the Battle of Gettysburg, July 1st, 2nd and 3rd, 1863, and that the position occupied by the several divisions, brigades and regiments of said army should be marked with tablets.

The erection of the Second Maryland (CSA) monument generated much conflict, but that was not the only reason that it became the only Confederate monument erected on the battlefield for the next several years. The story that the commemoration of the Gettysburg Battlefield had told up to that point was one of

Johnson offered an address decrying the plight of his poverty-stricken comrades, that they not be "disregarded because we are poor." "As time goes on, we have more needy and broken-down comrades. Some of them are already in the poor-house. Many are on the way there. Since 1865 we have been treated with chivalric courtesy and kindness by Union soldiers, and I have never heard of one of them acting towards our comrades otherwise than most generously. We have consistently voted pensions for them, for honorable soldiers deserve pensions. We cannot reasonably expect pensions for ourselves from the Federal Government, but it must commend itself to the sense of justice of honorable men that, while we contribute hundreds of millions to Union pensioners, our own loved comrades shall not be allowed to die the death of paupers and be buried in paupers' graves."

victory for the Union side, praising courage and heroism in the service of national reunion. By erecting fine monuments of granite and bronze and opening roadways, the people of the North not only honored victory, they celebrated the affluence that enabled such displays. The battlefield was not complicated by presenting the issues that had divided the nation in the first place. Nowhere was the landscape left laid waste, and nowhere was it announced that slavery had been one of the core issues of the conflict. The monuments themselves tried to tell the story as neutrally as possible. While trying to state that it was offering an unbiased record for the use of future study, the basic statistics of battles fought, and numbers lost, the GBMA ensured that the monuments did not cast an opinion other than honoring the hard work and manhood of the soldiers. As McConaughy had called his idea when he first proposed preserving the battlefield, the commemorative effort had become "A happy and patriotic conception."⁹⁴

One result of the disputes was that hereafter all monuments were to be placed at their main line of battle, something that had not been strictly enforced before this date. In fact, dozens of Northern regimental monuments were in forward positions on the battlefield. Southerners were particularly offended by this declaration, preferring to show the points of their advance and struggles as way to honor their own and their lost comrades' bravery. In May 1887 the Pickett's Division Association requested permission to erect a monument where General Armistead fell, behind the Union line near Hancock Avenue. After pondering the request, the association determined that "the granting of said application would be in violation of its rule requiring all monuments of the line of battle, the proposed monument be erected on the avenue to be opened upon the Confederate line and that a marker be placed to indicate the spot where General Armistead fell." That the decision to limit regimental markers to their battle lines was directly connected to Southern interests in monumenting the field is indisputable. The GBMA made the rule official on the day that Pickett's Division arrived at Gettysburg to discuss the memorial. Pickett's men placed the marker but did not pursue the monument on the Confederate position on Seminary

⁹⁴ For further reading, see Kirk Savage, *Standing Soldier, Kneeling Slaves: Race, War and Monument in 19th Century America* (Princeton, NJ: Princeton University Press, 1997).

Ridge.⁹⁵ The decision not to allow advanced position monuments made sense for the GBMA because the markers could have led to more confusion for those studying the battle.

These obstructions on the part of the GBMA were not only directed against the South, because they had been a part of the GBMA's manner in developing the battlefield all along and had more than once generated conflict. The Southerners were not the only ones who wanted to show their advanced positions. In August 1883 the GBMA created a resolution on the materials, design, placement and wording of memorials on the battlefield. The GBMA required that monuments be made of bronze or granite and have their inscriptions deeply incised to aid in making them durable for future generations. This precaution has proved wise for the enduring nature of the battlefield; the few monuments made of marble, for instance, have suffered severe erosion.⁹⁶ The monuments on the grounds of the GBMA were to be "submitted to the Board of Directors for their approval of the historical accuracy of the description." Two years later the board announced that in addition to monitoring the content of the descriptions, it would also "reserve the right to remove any monument so located to its correct position when title thereto is acquired by the Association."⁹⁷ The GBMA adopted even more stringent rules and regulations in December 1887, which were noted diligently in their minutes and sent in pamphlet form to the various memorial associations. By restricting monumentation to specific points the GBMA ultimately began to restrict the potential alignments of future avenues.

As a result of the decision to consider allowing Confederate monumentation at Gettysburg, which would mean opening avenues along the line of battle, in 1890 Bachelder produced a comprehensive map of the battlefield for the GBMA. Called "Map

⁹⁵ Vanderslice, *Gettysburg, A History of the Gettysburg Memorial Association*, 232-35.

⁹⁶ See the Twenty-seventh Pennsylvania Infantry monument on Coster Avenue and the Co. F (Vermont) U.S. Sharpshooters monument on Berdan Avenue.

⁹⁷ 28 August 1883, 11 August 1885, *GBMA Minute Book*, GNMP - Archives. A dispute over the position of the Seventy-second Pennsylvania Volunteers languished long in court in the 1890s.

of the Gettysburg Battle-field Showing the Public Roads and Union Avenues, also the Proposed Confederate Avenues," the map projected the possible complex network of avenues and served as a culmination of the potential of the park to present both sides of the conflict. Whereas today the terrain representing the Confederate actions on the field seems restricted, the proposed plan shows the armies throughout the landscape.⁹⁸ One element, however, indelibly determined the future development and characteristics of the avenues that affect the park to this day. The piecemeal system of acquiring land made it so that any more comprehensive plan for future park development was a challenge to put into practice. The slow acquisition of land for the avenues likewise determined the equally piecemeal construction of the avenues and ultimately made building new avenues prohibitively expensive. Unlike most highway systems that begin as single engineering plans, with rights-of-way generally purchased before construction of various sections begins, the association literally purchased rights-of-way and built avenues bit-by-bit. The land that the association desired was not what might make the best roadway, but what reflected the battle, so it was not an option simply to shift the alignments from one place to another because it was simpler to purchase another piece of property. Also, if states did not express interest in helping to purchase those lands that their soldiers had fought on, marking those lines languished until the necessary funds could be obtained from another source.

The GBMA also suffered from not having from its inception a comprehensive plan of what it wanted the park to become. The early years of the GBMA had lofty ideals but modest goals. The latter half of the administration seemed to take as its design the positions of the regiments themselves, any map of the battle equally serving as a potential map of the commemorated field. In 1884 the association selected a committee to plot on one of the government maps "prospective avenues or driveways on the battlefield" for the future use of the association. The minutes do not record what became of this map, but one can assume that whatever the committee created helped to direct the property purchases and opening of avenues for the next few years. It was

⁹⁸ John B. Bachelder, "Map of the Gettysburg Battle-field Showing the Public Roads and Union Avenues also the Proposed Confederate Avenues," January 1890, GBMA Flat Files, GNMP - Archives.

not until the late 1880s, however, that the GBMA began to develop a more inclusive plan for the park, determining what land that they wanted to acquire and what avenues they wanted to develop to tell both sides of the conflict at Gettysburg, both Union and Confederate. With avenues sprouting here and there according to the land purchases of least resistance, the quality of the roadways varied as much as the terrain; rocks, sand and swamp begat roads of the same materials. Despite the varied quality, the four miles of "drive-way" along the Union lines opened by 1883 reached areas that "heretofore could only be traversed on foot," so any sort of regularly maintained roadway into the battlefield would have seemed like an improvement. Besides, the GBMA opened the avenues as a way to access the battlefield and to facilitate the construction of monuments. At this point, finely engineered roads were not a goal in themselves, as they would become for the Gettysburg Park Commission.

In the final years of the GBMA and after the push of energy that brought so many regimental monuments to the field, the association began to face the possible future of the battlefield. The Union lines were largely completed, with avenues and pathways opened through most of the Army of the Potomac's significant terrain, and the association had even begun to add other formal features to the land besides monuments. In 1887 the association instructed its executive committee to place an iron picket fence around the Copse of Trees "to insure their protection," and in 1889 accepted the old iron fence from Lafayette Square, in Washington, D.C., to ornament and protect East Cemetery Hill. The contractor was to erect the fence, "unpainted, in granite blocks, and according to the lay of the land" from the front of East Cemetery Hill to Slocum Avenue, then to the turn towards Culp's Hill. Once in place, it was to receive a fresh and generous coat of paint.⁹⁹ The addition of ornate iron fences at select locations differentiated between parcels of Memorial Association land that were even more sacred than others.

The GBMA acknowledged that both its and the veterans' "ranks were thinning," and in August 1891 appointed a committee to "devise a plan of raising means for the future maintenance of the Field."¹⁰⁰

⁹⁹ 25 February 1887, and 12 July 1889, *GBMA Minute Book*, GNMP - Archives.

¹⁰⁰ 25 August 1891, *GBMA Minute Book*, GNMP - Archives.

The urgency of the committee's task seemed all the more imminent when one of the seven members died the following autumn. The committee began to think in terms of preserving even more than the battlefield, and searched for "a suitable site for the proposed Museum." The association, however, did not reveal the extent of the anticipated project or what it intended to place in the museum.¹⁰¹

Bachelor's appeal to Congress for funds to mark and create avenues along the Confederate battle lines was just one of the efforts made to generate wider interest and support in the battlefield's future. In 1887 Congress had appropriated \$15,000 to mark the U.S. Regular commands, another area that had long been neglected.¹⁰² The first recorded appeal by a congressman to establish Gettysburg as a national park came from Michigan Representative Byron M. Cutcheon. He recognized the accomplishments and dedication of the GBMA, but reminded everyone that "there is something due to history as well as to patriotism. There were two armies at Gettysburgh [sic]." The work, he said, was too much for the GBMA to accomplish financially or practically on its own, and in addition contradicted the initial purpose of the association. A proper park that included the positions of both armies "must be done by the National Government or remain undone."¹⁰³ Cutcheon's proposal came only days after Congress authorized legislation for the Chickamauga and Chattanooga National Park, but was refused for consideration. In 1892 Oscar Lapham of Rhode Island made another attempt to create a national park at Gettysburg, but his plan was also rejected.

Federal attention finally focused on the battlefield as a result of the proposed construction of an electric street railway across the key positions of the battlefield, the most extreme example to date of outside interests seeking to profit from the

¹⁰¹ 16 September 1892, *GBMA Minute Book*, GNMP - Archives.

¹⁰² The GBMA had pursued getting the U.S. Regulars monuments erected on the field as well, but the government refused to invest in the monuments if it did not control the land on which the monuments stood.

¹⁰³ U.S. Congress. House. House Committee on Military Affairs, *Battle Lines at Gettysburg*, Rpt. 3024, 51st Cong., 1st sess., 1890, 4.

battlefield's growing popularity. Across the country and particularly in urban areas, electric street railways, using the most advanced technology of the age, were becoming a popular means of transportation.¹⁰⁴ Efficient railway service finally reached Gettysburg in the early 1880s with the Gettysburg and Harrisburg Railway, and by 1885 the branch of the line called the Round Top Railroad had been extended through the battlefield to the Round Top Area.¹⁰⁵ In the summer of 1882 the railroad company had first proposed running its line through association lands in addition to erecting a pavilion and an observatory on Big Round Top. The GBMA refused to consider the offer. The company had asked that the association "harmonize with it in its contemplated enterprise," to which the association responded that it "decline[d] to confer upon the subject as it does not approve of the contemplated project."¹⁰⁶

The proposed construction of an electric railroad, however, even more directly threatened the battlefield avenues. In August 1891 representatives of the Gettysburg Electric Railway Company appeared before the association and again "asked [for] the right of way over the Association's grounds and along the several avenues marking the lines of battle." The association informed the representatives that their "request was not granted."¹⁰⁷ By refusing the request, the association made clear that its avenues were not mere roadways for ease of transportation, but were significant additions to the battlefield landscape that aided in understanding the battle. Unfortunately, the Electric Railway Company persisted in its efforts, and since it was denied access to the roadways already opened by the association, determined to cross the battlefield wherever it pleased to reach the heart of the battlefield, the Valley of Death and Devil's Den. When

¹⁰⁴ Ronald F. Lee, *The Origin and Evolution of the National Military Park Idea*, U.S. Department of the Interior, National Park Service (Washington, D.C., 1973), 14.

¹⁰⁵ *Cultural Landscape Inventory for Gettysburg National Military Park, Landscape Level II*, U.S. Department of the Interior, National Park Service (Denver Service Center, 1997), 22.

¹⁰⁶ 27 July 1882, *GBMA Minute Book*, GNMP - Archives.

¹⁰⁷ 25 August 1891, *GBMA Minute Book*, GNMP - Archives.

dynamite blasting and construction began in the spring of 1893, the association petitioned the Pennsylvania State Legislature that if the bill granting the right of eminent domain to the Electric Railway Company was passed, then the Gettysburg battlefield should be exempted.¹⁰⁸

The Electric Railway Company had constructed its line across battlefield lands using the same laws to open access across private lands that the GBMA had used to open its avenues, the only difference being that the railway was for commercial profit and the GBMA avenues for commemorative purposes.¹⁰⁹ One of the most difficult ironies for the association was that because it adhered to the more economical policy of acquiring only strips of land for avenue access, most of the battlefield was still private land and available for the railroad to acquire or condemn for its own uses. A key piece of property that the railroad crossed was Crawford Park, the lands of General Crawford, a deceased member of the association. The land had never been formally transferred or purchased by the association from Crawford's heirs. The GBMA, in turn, initiated condemnation proceedings against the railroad, protesting against and recording the "injury done the Battlefield by the construction over, along, and through its lines [by] the Electric Railway," and to "protest against it as an undoing in a few days of much of our work of many years."¹¹⁰

Despite the agony of years of litigation and the damage its construction caused the battlefield, the railroad forced the issue of battlefield preservation into the public eye. Ultimately, the conflicts over the electric railroad helped to advance the cause of having the federal government take over the operation of the Gettysburg battlefield, particularly when veterans began to voice their concerns about the "desecration" of the field. In the midst of the controversy Confederate soldiers became allies of the GAR, particularly when it became public that

¹⁰⁸ 19 May 1893, *GBMA Minute Book*, GNMP - Archives.

¹⁰⁹ Kinsel, "From These Honored Dead," 204.

¹¹⁰ 19 May 1893, *GBMA Minute Book*, GNMP - Archives.

a corporation owned the land of the Confederate battle lines and proposed developing it into building lots.¹¹¹

While Congress resisted extensive support of Gettysburg, it was not necessarily neglecting the battlefield. In March 1893 Congress had appropriated \$25,000.00 to the War Department to aid in mapping the battlefield grounds, to mark the lines of Northern and Southern positions, and to open avenues along those lines. To carry out the work, the War Department appointed a three-man commission, "each of whom shall have been participants in the battle of Gettysburg, and one of whom shall have been an officer of the Army of Northern Virginia."¹¹² Oddly enough, the War Department was not actually authorized to purchase land, meaning that it was supposed to build roads on land that it did not own. In 1894 Congress sought to fill the holes in its 1893 legislation by appropriating \$50,000 to the War Department and authorizing it to purchase whatever lands it needed to preserve key points on the battlefield as a way to secure the battlefield lines and build avenues. With the new legislation, if landholders refused the United States government's offer of purchase, the government could initiate condemnation proceedings to acquire the property. The government, therefore, could condemn those lands belonging to the Gettysburg Electric Railway Company. The railroad appealed the ruling, saying that preservation was not a permissible public use, and it was not until 1896 that the litigation was ultimately settled.¹¹³ Appeals resulted in the Supreme Court ruling that the federal government had the right to condemn private land for the preservation of nationally significant historic sites and buildings. Ironically, both the Round Top Railroad and the Gettysburg Electric Trolley had the capacity to bring larger numbers of people into the battlefield without the use of carriages and, by 1905, without automobiles. The automobile ultimately curtailed the life of all of the railroads in the region and posed challenges for the avenue system that have perplexed the various park administrations into the present.

¹¹¹ U.S. Congress. House. Committee on Military Affairs, *Gettysburg Battlefield*, Rpt. 2188, 52nd Cong., 2d sess., 1892, 1.

¹¹² House Committee on Military Affairs, *Battle Lines at Gettysburg*, 4.

¹¹³ *United States v. Gettysburg Electric Railway Co.*, 160 U.S. 576 (1896).

Despite the regular bills put forth in Congress by dedicated lobbyists, only when Representative Daniel E. Sickles of New York stepped in to sponsor the bill did Gettysburg become a national park. Sickles was the charismatic and controversial leader of the Third Corps at the Battle of Gettysburg. Sickles had lost his right leg on the second day of battle after he ignored his commander's orders and moved off the defensive line on Cemetery Ridge for the more vulnerable Wheatfield and Peach Orchard. Besides always defending his actions on the Gettysburg battlefield, he remained familiar with the commemorative development of the field through his role as chairman of the New York State Monuments Commission, in charge of placing monuments on the Civil War battlefields. Just when the issues surrounding Gettysburg were reaching their height, Sickles was elected to the 1893-95 term in Congress and made Gettysburg one of his key issues. On 6 December 1894 Sickles introduced his bill, H.R. 8096, which soon passed the House and Senate and was authorized by President Cleveland on 11 February 1895.¹¹⁴ One of the lasting elements of Sickles' work to establish a national park at Gettysburg was the creation of the "Sickles Map," which has guided the boundary restrictions of all future work at Gettysburg. This map established a park boundary and limited the number of acres that the park would need to acquire to create a complete battlefield park.¹¹⁵

The legislation creating a national park at Gettysburg authorized the Secretary of War to accept all of the GBMA's property and granted an initial \$75,000 appropriation to fulfill the objectives of the new park in marking both lines of battle with tablets and avenues, with \$2,000.00 going towards settling the GBMA's debts. The War Department maintained its three-man commission to carry out the work and run the park, and for the first time, Confederate veterans had an authorized voice in creating the park at Gettysburg. The new legislation set in motion measures that would substantially alter the landscape of Gettysburg as the next stage of development began for the park. This stage, as well, was controlled by Battle of Gettysburg veterans. The miles of avenues in the park would be transformed from mere access routes across the battlefield land to roadways

¹¹⁴ Lee, *Origin and Evolution*, 26-27.

¹¹⁵ *Act to Establish a National Military Park at Gettysburg, Pennsylvania*, ch. 80, 28 Stat. 651 (1895).

that symbolized the battle and the strength of a nation united for the twentieth century.

Facing increasing debts, on 3 October 1894 the GBMA board agreed to transfer its holdings to the United States. The GBMA owned approximately 600 acres of land, on which about seventeen miles of avenues had been laid out and constructed, giving access to about 320 monuments. The work of the association, as laid out by its original charter, was "substantially completed."¹¹⁶ By March of 1895, just prior to when the lands were to be formally transferred to the federal government, the figures had altered significantly, perhaps due to the work of the Gettysburg National Park Commission. "The work of this association as outlined in its charter has been substantially finished," said the minutes. "The Union lines of battle have been purchased and made accessible by avenues which reach every important historical point. Upon these avenues over 400 tasteful monuments have been erected by the States which had troops in the battle. The Association had obtained title to nearly 800 acres of land and had laid out twenty-odd miles of avenues." The GBMA was fully aware that there was much to be done in constructing avenues along the Confederate lines of battle. Aside from balancing the story of the Battle of Gettysburg told on the field, the GBMA was certain that "the work of the future will be chiefly maintenance and adornment," a summation that the Gettysburg Park Commission would be quick to reassess. On 22 May 1895 the Gettysburg Memorial Association Minute Book offered one final note: "There being no further business the Board Adjourned."¹¹⁷

The War Department (1893-1933):

Study of the development of the avenues under the War Department can be divided into three distinct time periods. The major avenue construction occurred between 1893 and 1913, when there was liberal funding and motivation to "complete" the battlefield park in preparation for the fiftieth anniversary of the Battle of Gettysburg. The commission lavished time and energy on the battlefield, creating a national park out of what had been the project of Northern veterans. By 1913 the commission had not only opened most of both armies' lines of battle, but also the road, bridge, and culvert construction under the War Department

¹¹⁶ 3 October 1894, *GBMA Minute Book*, GNMP-Archives.

¹¹⁷ 22 May 1895, *GBMA Minute Book*, GNMP-Archives.

took on design characteristics reflecting the massive scale of the battle, the monuments, and the overall park. Many of these avenue features survive in the park today. The commission, likewise, oversaw the replanting and care of woodlots and concentrated on purchasing land for more avenues as well as land that had seen extensive fighting in the battle. It also added consistent design features to the landscape, such as fences, cannon carriages, and markers.

From 1913 until 1922, avenue construction and the erection of markers and other monuments continued, but tighter budgets and changes in road-building methods in the park create a distinction between the first two periods. The commission began to advocate less labor-intensive avenue construction and discovered that cement was not only more economical, but also it could be used in many of the same places where local granite had been used. Likewise, by 1913 the increasing numbers of automobiles in the park forced the commissioners to introduce new design and maintenance elements to the avenues since only horses and carriages had been anticipated.

From 1922 until the NPS assumed control of Gettysburg in 1933, the avenues continued to suffer due to limited maintenance funds and because of the effects of growing automobile use. When the last veteran who had worked in an administrative capacity at the park died in 1927, the avenues and park underwent immediate changes in purpose and maintenance, seeming to symbolize the transference of Civil War veterans from active life into silent national memory. The subtle changes in care and administration that occurred in the last days of the War Department's tenure of Gettysburg anticipated the greater changes to come under the NPS.

Gettysburg National Military Park's subsequent development, particularly in the treatment of the avenues, represents the struggle of the national park system to absorb parks of historic significance into a system that had been focused on preserving and presenting nature.

Thirteen years after the federal government formally took over administration of Gettysburg, John P. Nicholson summed up the National Park Commission's accomplishments in his 1908 Annual Report. "When the United States took control of the battlefield," wrote Nicholson,

the following conditions were prevalent and general. Old earth roads, with steep grades in many places, made the lines of battle of the Union Army, in a measure, accessible to visitors in carriages; there was no way to reach Confederate positions except on foot. A few of the Union batteries were represented by guns of a kind never used in the battle and mounted upon impossible gun carriages. The Memorial Association's lands and roads were lined with barbed-wire fencing, and very little attention had been given to keeping the field in a respectable appearance.¹¹⁸

In 1925 Emmor B. Cope, for thirty years the park engineer and topographer and for five years its first superintendent, concisely surmised the inadequacies of the park under the GBMA. "While much had already been done in laying out avenues and the erection of regimental monuments," he wrote, "nothing as yet had been done to convert the avenues into permanent roads. The different lines of battle were not accurately marked. Important sections of land remained in private hands." In addition to accomplishing these ends with the construction of almost thirty-five miles of Telford and macadam avenues, Cope regarded his and the commission's work as so thorough that the park avenues, monuments, and tablets created a map upon the land of the Battle of Gettysburg. "The work is so complete," he reported to the War Department, "that a visitor is able to go from point to point unguided, and get a very correct story of the three days' battle."¹¹⁹

Under the guidance of the Gettysburg Park Commission, the battlefield had undergone a transformation from haphazard development and care to becoming a national park. Whereas the GBMA focused upon the monumentation of the battlefield with the development of avenues meant to provide at least some form of access, the commission turned the avenues themselves into battlefield monuments constructed with the most advanced road-building technology of the late nineteenth century. When it

¹¹⁸ John P. Nicholson, *Report of the Gettysburg National Park Commission* (Washington, D.C.: Government Printing Office, 1908), 3.

¹¹⁹ Emmor B. Cope, *Report on Gettysburg National Military Park*, c.1925, GNMP - Archives.

improved and extended the avenues at Gettysburg, the commission also tested new theories in road construction, combining the highest quality road construction with a special regard for the battlefield landscape on which it was building avenues. The road surface had to be durable, but it also had to fit within the commission's purpose "of preserving the features of the battlefield as they were at the time of the battle and also rendering all parts of it accessible."¹²⁰

Like the GBMA, the commission was called upon to preserve and mark the battlefield. The Gettysburg Electric Railroad had already illustrated the need to protect the battlefield from commercial interests and other threats to Gettysburg. The enabling legislation also called upon the commission to "superintend the opening of such additional roads as may be necessary for the purposes of the park and for the improvement of the avenues heretofore laid out therein."¹²¹ In a sense, the commission had been given a contradictory dual mandate. On the one hand the commission had the duty of preserving and protecting the battlefield so that it could stay as close as possible to its 1863 appearance, yet the commission also had to make the battlefield more accessible for tourists and "military people and others making a study of the positions and movements of the troops." Simply to construct a road through the battlefield along the path of least resistance would have cut into the very ground that the veterans had fought to preserve. The commission had to consider that its contributions to the field, at every level, would add to the monumentation and aid in understanding the battle. In order to preserve the fields and even the ground that the avenues covered in their construction, Nicholson reported that "to that end [the Commissioners] have been careful not to have deep cuts and high embankments made in the construction of a road or avenue, but rather to preserve the grade by curving the lines to conform more nearly to the contours of the ground." So not only did the avenues follow the lines of battle, they disturbed the ground as little as possible.

¹²⁰ Nicholson, *Report of the Gettysburg National Park Commission*, 4.

¹²¹ *Act to Establish a National Park at Gettysburg, Pennsylvania*.

The Gettysburg National Park Commission was appointed on 25 May 1893 by Secretary of War Daniel S. Lamont, with its members first meeting 31 May 1893. The commission was initially made up of two Battle of Gettysburg veterans, one each from the Union and Confederate armies, and one "civilian member." Although many other memorial commissions had veterans appointed to oversee work, Gettysburg was the first to stipulate that one member must be from the South. Each man had already had been associated with the development of the battlefield park or other veterans organizations for several years.

Colonel John P. Nicholson, of Philadelphia, became the longest-term member of the commission, remaining dedicated to the development of the field for nearly three decades until his death in March 1922. In the Battle of Gettysburg he had served with the Twenty-eighth Pennsylvania Volunteers and after the war became active in several veteran and fraternal societies. He served on the Board of Commissioners on Gettysburg Monuments beginning in 1887 and provided the necessary leadership when conflicts arose between the organization's guidelines and regimental preferences for the materials, inscriptions, and placement of their monuments. The *Daily Democrat* labeled him "The Man to Mark the Lines," and heralded his overseeing the construction of over eighty Pennsylvania monuments. That experience alone recommended him, because it provided "much practical experience in dealing with contractors and regimental associations." His level-headed business sense likewise appealed to those who were concerned about the misuse of government appropriations. Under Nicholson, marking the battlefield "would be done promptly, intelligently and honestly and with due regard to the truths of history." The *Philadelphia Inquirer* likewise supported Nicholson's appointment to the commission because he would bring to it "a broader mind, accurate information and the much-needed executive ability."¹²² Nicholson had long made a study of the Civil War, collecting a comprehensive library of works pertaining to the war, and his knowledge was widely known and respected. His fellow commissioners seemed also to recognize

¹²² "The Man to Mark the Lines," *The Daily Democrat*, 21 March 1893; "A Practical Remedy for the Gettysburg Trouble," *Philadelphia Inquirer*, 31 May 1893. In John P. Nicholson's private scrapbook (hereafter cited as Nicholson's scrapbook), GNMP - Archives.

his leadership abilities and general acceptance with the public, and named him Commission Chairman in July 1893.¹²³

General William H. Forney of Alabama, perhaps because he was not as well known in the North, did not generate the same kind of accolades as Nicholson. The *Philadelphia Inquirer* simply noted that he "supplies the needed Confederate element." Since the enabling legislation stressed marking the Confederate line, Forney's presence was meant to ensure fair and accurate Southern representation on the field and to encourage Confederate veterans to visit, mark, and monument Gettysburg. His presence was particularly important at the early stage of laying out the Confederate lines for avenue construction because while the avenues had been considered, none had been constructed. In the Battle of Gettysburg Forney sustained six wounds while commanding the Tenth Alabama Infantry, and the injuries crippling him for life. Illness prevented him from actively visiting the field very often, so that he even missed the first meeting of the commission. He died 16 January 1894 and was replaced by Major William M. Robbins, also of Alabama.¹²⁴

John B. Bachelder, the government historian of the Battle of Gettysburg, received his appointment to the commission despite "some objections." He had had a long association with the battlefield beginning in the days immediately after the battle, when he had interviewed battle survivors from both armies and made sketches of the battlefield. His knowledge of the battle, mapping abilities, and membership with the GBMA since 1880 made him a logical choice for the appointment. His associations with local resort development may have seemed to be a conflict of interest, but it is more likely that his inability to produce the

¹²³ The Gettysburg National Military Park can also appreciate Nicholson's love of fine books and book-binding. All of the correspondence, maps, expenditure records, journals, pamphlets, etc. were bound for future reference. Just as the monuments and Telford avenues were built for "centuries," Nicholson doubtlessly felt that he was preserving the written record of the park's development for centuries as well.

¹²⁴ *Philadelphia Inquirer*, 31 May 1893, Nicholson's scrapbook, GNMP - Archives; Kathy Harrison, "William Henry Forney," from "Commissioners & Superintendents, Gettysburg National Military Park," Kathy Harrison, private files, GNMP - Archives.

kind of comprehensive battle history that he had always promised rendered him objectionable. One journalist noted that the War Department likely was willing to overlook complaints against him because he was "one of the most active advocates of the plan of marking the Confederate lines," and that "it would not be fair to rule him out altogether." Bachelder guided the GBMA in the acquisition of land and layout of avenues, designed the High Water Mark of the Rebellion tablet at the copse of trees, and received the honor of an appointment to the commission. His death on 22 December 1894, however, prevented him from seeing the battlefield become the national park that he had envisioned and worked towards.¹²⁵

Major William McKendree Robbins, who replaced General Forney in March 1894, became one of the most important commission members during the early period of the national park's continued development. Because he represented the "Southern side," Robbins was often responsible for taking visitors onto the field. He worked arduously to bring more Confederate comrades to Gettysburg and researched and wrote most of the texts for the Confederate tablets on the battlefield. His work helped to heal the differences still remaining between the Confederate and Union soldiers. Despite his efforts to bring more tangible signs of reconciliation to Gettysburg, however, few Southerners chose to support even modest monuments and markers. When Robbins died in May 1905 he was replaced by General Lindsay L. Lomax, who served as the final Confederate representative until his death in 1913. Lomax, unfortunately, never equaled Robbin's dedicated legacy to the development of Gettysburg.

Major Charles A. Richardson, who had served at Gettysburg with the 126th New York Volunteers, was appointed to the commission in January 1895 to replace Bachelder. Whereas Nicholson provided the overall administrative direction for the commission and Robbins offered legal advice and the patience to draw more Southern attention to the field, Richardson contributed an avid interest and knowledge of farming and botanical interests. He supervised projects to replant woodlots and to add ornamental and

¹²⁵ *Philadelphia Inquirer*, 31 May 1893, Nicholson's scrapbook, GNMP - Archives; Kathy Harrison, "John Badger Bachelder," from "Commissioners & Superintendents, Gettysburg National Military Park," Kathy Harrison, private files, GNMP - Archives.

specimen trees to the battlefield. He was also responsible for the narratives on the Union brigade, division, and corps tablets, until ill health in 1915 prevented him from making frequent trips to Gettysburg from his home in Canandaigua, New York. Upon his death in January 1917, no one was assigned to replace him, in accordance with a ruling that did not allow commissioners to be replaced upon their death. The War Department had anticipated creating one commission to oversee all of the military parks and monuments, particularly in light of the dwindling number of veterans with the strength and endurance to take on such responsibilities. Although that commission was never created, the moratorium on new appointees held, meaning that as commission members died, the workload fell to those who remained.

Each commissioner, and Nicholson especially, contributed his strengths to shaping Gettysburg National Military Park into a large battlefield commemorative park. One man, however, was instrumental in the overall appearance and transformation of the park during the decades that the War Department controlled Gettysburg. Colonel Emmor Bradley Cope supervised mapping the field, plotted the avenues, and designed many of the structural features that remain on the battlefield today. The designs for park towers, corps, division, and brigade markers and many other avenue features received his attention at the same time as he oversaw the large park work force and other daily operations. Cope had served under General Warren with the Topographical Engineers Corps of the Army of the Potomac at the Battle of Gettysburg and returned several months after the battle to create a topographic map of the field.¹²⁶ Thirty years later, on 1 July 1893, Cope became the Engineer to the United States Battlefield Commission at Gettysburg, beginning what was to become a thirty-five year dedicated association to the battlefield. He was selected not only for his mapping and engineering skills, but also for his familiarity with the landscape at the time of and shortly after the battle. Of all of the men who served in higher official capacities in the national park, Cope was the only one to make his permanent residence at Gettysburg, which meant that in the winter months when the commissioners no longer made the journey to Gettysburg, Cope in effect supervised the park. Cope

¹²⁶ Emmor B. Cope, "Map of the Battle-Field of Gettysburg, PA, July 1, 2, and 3, 1863," GNMP - Archives. The map was to be included in a military atlas to accompany the "Official Records of the Rebellion."

was even buried in Gettysburg, in the Evergreen Cemetery, alongside the fence to the National Soldiers' Cemetery. Cope had joined the army against the wishes of his Quaker family, making his dedication to the battlefield and his burial near but not with fellow soldiers all the more poignant.¹²⁷

One of the first tasks facing the commission before it could build new avenues and replace the old was to begin properly mapping the entire battlefield. Cope led the mapping effort, drawing on his familiarity with the battlefield as well as what proved to be superior mapping abilities. As their grid and basic plan the engineers used a map created by Warren a few years after the battle.¹²⁸ "Of all the mass of material that has been placed at our disposal," wrote Cope in his annual report to the commission, "the Warren Map is perhaps of the most advantage to us. Yet we find here an immense amount of information to be added without which no map of the field would now be complete."¹²⁹ The newer map was to show the varied 1890s details of the battlefield's topography, such as "streams, roads, buildings of every description, monuments and markers, avenues, timber, earthworks, stone walls, fence lines, and rocks," at the same time as mapping the battlefield's "undulations" by contour lines

¹²⁷ Cope is a bit of a reclusive figure in the records at Gettysburg, even though his name appears on nearly every blueprint, sketch, and in the handwriting of many of the records kept at the park. So far the only article available that offers a glimpse of his life and his impact on Gettysburg is: Thomas L. Shaefer, "If You Seek His Monument, Look Around: E. B. Cope and the Gettysburg National Military Park," in *Unsung Heroes of Gettysburg*, Programs of the Fifth Annual Gettysburg Seminar, National Park Service (1996), 107-133.

¹²⁸ "Map of the Battlefield of Gettysburg," Engineering Department, U.S.A., surveyed under the direction of Major General G. K. Warren, 1868-69, ground revision 1873; Gettysburg National Park Commission, *Blueprints in Sections Scale 200 Feet to the Inch - Gettysburg National Park, 1893-95*.

¹²⁹ Emmor B. Cope, *Annual Report to the Gettysburg Park Commission, 1893*, GNMP - Archives.

for each 4' of difference in level.¹³⁰ Compiling an "accurate and complete instrumental survey" of the battlefield in preparation for a map representing the whole battlefield began an almost scientific approach to the study and expansion of the battlefield. The topographers began by establishing a meridian, "which in all the Surveys since the War had never been done," with the square in the town of Gettysburg for the center. The map would represent the battlefield on a scale of 200' to the inch, consisting of twenty-five sheets, 27" x 28-1/2". The map, once completed, enabled the commission to begin to plan the park and its avenues as a comprehensive system, superimposing the new plan of avenues upon the battlefield. By understanding the nature of the battlefield in its incremental details, and the relationship of the terrain to the battlefield landscape features that survived, the commission could begin to plan and construct the avenues with more awareness of and respect for the peculiarities of the landscape.

From the beginning the commission and its workforce approached the development of the Gettysburg battlefield with military expertise and precision. "Roads are necessities of civilization in peace or war," begins *Roads and Rail-Roads*, a book from Nicholson's park collection. "Savages make no roads," the author continued. "Semi-civilized people contentedly follow the cow paths. Civilized men make roads. And, in any country, the character of the roads indicates the civilization of the people." The battlefield avenues were not to be "cow paths," but orderly, planned, and engineered features on the land that would distinguish them from all the surrounding roads. The avenues would come to symbolize not only the tastes of the men who built them, but that the Battle of Gettysburg allowed civilization to prosper in the United States.¹³¹

The military may have had specialized ways of approaching the land as it existed in time of battle, but when it came to

¹³⁰ John P. Nicholson, *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War, 1893-1904* (Washington, D. C.: Government Printing Office, 1905) 1894, 15.

¹³¹ James Chester, *Roads and Rail-Roads, Course of Military Communication, Parts II and III* (Fort Monroe, VA: United States Artillery School, 1882), 1.

commemorating and honoring the dead and the brave still living, they turned to the accepted modes of the time. It is no coincidence that across the country, towns and villages erected statues, monuments and markers to their Civil War dead in the local town squares and parks. In Brooklyn, New York, the arch that became the gateway to Prospect Park, one of Olmstead and Vaux's most famous park designs, was erected by Union veterans in 1895, the same year that Congress authorized the Gettysburg battlefield as a National Military Park. The arch at Prospect Park combined the public park movement with the burgeoning public commemoration of the Civil War. Gettysburg became the focal point and largest example of that commemoration, but evidence of the nation coming to terms with the war appeared everywhere.

The planning and construction of avenues at Gettysburg, while on the one hand a practical creation of an infrastructure to enable people to view the battlefield, was also an elaborate landscape architecture plan. The avenues became one of the means by which the veterans of the Civil War could tell their stories to the larger public and to each other. The miles of technically advanced piked roads connected the corps, brigades, regiments along their lines of battle, poising the men, represented by monuments and markers, as always ready for battle, ready for each generation to play out the days' events in search of education, memory, and meaning. The avenues linked the larger commemorative system of the Gettysburg Battlefield into a planned and comprehensive whole.

Preserving the Field and Avenue Construction:

Construction of the early avenues accommodated memory, topography, and traces of battle remains. One of the earliest threats to the park, as introduced in the previous section, also became one of the catalysts for its preservation. The Gettysburg Electric Railway asked the GBMA for rights to pass across the lands of Devil's Den, the Wheatfield, and other sites central to the battle. In 1893, before proceedings had been fully reviewed, Emmor B. Cope heard blasting in the distance, the sound of dynamite blowing away rocks to clear a level grade through the Valley of Death for the electric railway. Unlike the careful plans of the commission, intended to disturb as little as possible of the original topography, introducing the trolley lines violated all the rules of topographical sensitivity. The event escalated preservation, and witnessing the methods and intents of the railroad helped the commission distinguish its own

approach to the battlefield and how invasive it should allow avenues to be upon the landscape.

By the end of its first year the Gettysburg National Military Park Commission had completed a preliminary survey of 20 miles of avenues and proposed avenues, and determined the lines of 27 miles of public roads and 24 miles of property lines, thereby putting in motion what was to become over a decade of monumental avenue construction. Men ranging from the common soldier to figures of ranking importance continued to visit the battlefield to mark their positions, allowing for more accurate placement of the permanently constructed avenues. The overwhelming cost of acquiring land impeded opening avenues. The situation escalated when some landowners determined that they could profit by speculating on lands that the government might need to purchase. "The Commission has not thought it wise to open avenues until such time as land can be purchased at reasonable rates," said Nicholson in his 1893 report to the War Department. The commission looked for "the opportunity to buy odd lots" at competitive and reasonable rates and made it known that the commissioners were willing to turn to the courts for those lands needed to carry out park plans. Negotiations over many properties went to court and condemnation proceedings, but even then sometimes the courts made settlements that were far more in favor of the landowner than those petitioning on behalf of the battlefield.

The work of actual avenue construction did not begin until late 1894, but mapping had continued unabated in preparation for when funds would be available to carry out plans. Nicholson reported that Cope and his assistant, Mr. S. A. Hammond, included "a large amount of surveying and mapping of tracts of land for avenues, laying out, leveling, cross-sectioning, preparing maps and specifications of the avenues proposed and projected and sections of avenues for use of contractors." In light of the complications of acquiring some of the land the commission wanted, Nicholson diplomatically referred to the amount of attention dedicated to surveys that would correct the battle lines laid out by the GBMA, saying that the new surveys worked to "harmonize conflicting property lines."¹³²

¹³² Nicholson, *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War, 1893-1904*, 1894, 13.

The year 1895 saw the beginning of visible avenue construction on the battlefield. Not only were the GBMA lands transferred to the federal government, but increased allotment of funds also enabled accelerated activity. Cope wrote to the commission that at the time of his last report in 1894 "not more than one section of the roadway was in process of construction." One of the reasons for this was that the commission still did not have the necessary authority to take over and purchase needed lands, and it had not yet reached a decision about how it wanted to construct the avenues or the design features, such as the fences, culverts and bridges that would accompany the avenues. Cope approached his task to map the battlefield and plan the avenue system as he would a reconnaissance mission for the military; he wanted to know the lay of the land and all of his options before committing his resources. "So important a work as the system of military avenues," wrote Cope, "was not undertaken by the Commission without careful consideration, and exhaustive study of the subject."¹³³

What Cope modestly does not announce, however, is that it was his exhaustive research that helped determine the engineering and design of much of the Gettysburg battlefield avenue system. Cope's research took him to Baltimore and Philadelphia to study the avenue and drainage systems of Druid Hill Park and Fairmount Park. That the commission turned to public parks as its inspiration, even in infrastructure, shows that it was fully aware of creating itself as a public park while at the same time as preserving its battlefield features. At Druid Hill Park, Cope found only one avenue of any quality to judge, that being the 1200' Swan Avenue. Nearly 10 miles of the park avenues had been macadamized, but only Swan Avenue had had quality stone placed on the surface as a top-dressing. Cope duly noted the failed performance of the sub-standard materials, such as the surface of "rotten stone," and made certain to test sections of his own avenues for durability for over a year before committing to a final avenue surface material.¹³⁴

¹³³ Emmor B. Cope, *Engineer's Report to the Gettysburg Battlefield Commission*, 1895, 1.

¹³⁴ For information on the materials and methods that Cope tested, please see the Avenue Appendix, number 37, Sedgwick Avenue.

The gutter and culvert drainage systems at Druid Hill Park impressed Cope with the solid slate and brick construction and the connections to underground sewers. Aspects of the system, which he called "the best I have seen" were adopted for Gettysburg, including wide paved gutters leading to deep squared catch basins. At Druid Hill Park, pipes inside the basins conducted the water under the roadbed and led it to the best point of drainage. Cope's own catch basin designs would prove more substantial than those at Druid Hill Park, because he used solid pieces of Gettysburg granite to create the headwall high against the avenue edge and, in some cases, a completely enclosed box to catch the water from the gutter system. The groves and grounds of Druid Hill Park were kept "in proper condition" by keeping underbrush cut out, trees trimmed part way up their trunks, and all leaves and refuse collected and burned. Three flocks of Southdown sheep mowed the open ground efficiently, requiring only the care of a shepherd rather than the care of many men.¹³⁵

The offerings at Fairmount Park also impressed Cope, but he found himself more interested in the variety of road surfaces and wear than their construction. The avenues and some "common gravel roads" ranged from muddy to dusty. One of the park's bridges had a more lasting impact on Cope. Bridge No. 9, as Cope labeled his watercolor illustration of the span, was a "very substantial bridge," which had been built on one of the Fairmount Park driveways for Philadelphia's 1876 Centennial Exposition. "It is very well-designed, substantial and durable," wrote Cope, "and would be a good style for some bridge in this park."¹³⁶ The central core of the bridge found itself echoed at Gettysburg as six culvert bridges on West Confederate, Brooke, and East Confederate Avenues. Four still survive, each constructed of Gettysburg granite, with 16' long massive headwalls, 11'-2" from the base of the structure to the granite slab top stone. Three

¹³⁵ Emmor B. Cope, *Reports on Roads, Bridges, Culverts, and Paint*, 1 November 1895; Emmor B. Cope, No. 4 Gutter and Inlet Druid Hill Park, watercolor, GNMP - Archives.

¹³⁶ Cope, *Reports on Roads, Bridges, Culverts, and Paint*; Emmor B. Cope, No. 9 Avenue Bridge, Fairmount Park, Philadelphia, watercolor, GNMP - Archives.

courses of granite rise above the arch key, which help support the brick arches, also three courses thick.¹³⁷

The following year, in August 1896, Cope once again traveled to study parks and communities for structural features that might help him in his work at Gettysburg. This time he sought examples of bridges, paint, "water closets" and piked roads. As in the search for drainage systems, economy remained a chief consideration, but always with durability and beauty drawing his attention. Rather than the avenue bridges over the small waterways in the park, Cope searched for examples of bridges that the commission could construct in the park, particularly over the Western Maryland Railroad, as part of Reynolds Avenue. A bridge in York was rejected for its expense; a street car bridge in Lancaster was rejected because its floor was supported by stirrups and girders; a foot bridge at Washington Park, New Jersey, failed his scrutiny because it was not adapted to heavy loads. Not entirely satisfied with what he had found, Cope surmised that Figure 6 of his sketches was "the kind of bridge I would recommend for the crossing." The bridge that he presented was an arched solid steel girder bridge (he does not identify its location), with steel cross beams, an oak floor, and I-bars resting on top of the lower grade braces, and capable of bearing a load as high as 50 tons. Girder bridges, Cope informed the commission, were coming into more use for locations liable to see heavy loads. "They are in every way more economical, are less liable to get out of order on account of the small number of parts, there is very little vibration, [and] therefore less tendency to crystalize." Unfortunately, they were "not so attractive to the eye as steel truss bridges," but were safer and more durable.¹³⁸ Cope ended up designing a bridge very much like the one that he described, but it was another nine years before it was constructed. When completed in June 1905, the bridge spanned 50' and rose 20' from the railroad tracks to the base of the arch.

Cope's exploration of sources of paint had a more tangential connection to the avenues, affecting the decorative elements of

¹³⁷ Measurements are drawn from: Cope, "Plan of Culverts No. 1 and 2, to be built on Avenue through Culp Property," blueprint #408, GNMP - Archives.

¹³⁸ Cope, *Reports on Roads, Bridges, Culverts, and Paint*.

the avenues rather than the road surfaces themselves. Part of his efforts to complete an overall design scheme for the park included the paint that would help to maintain exposed wood and metal. From Geo. D. Wetherill & Co. in Philadelphia, Cope and a helpful member of the firm devised "a satisfactory shade of red" for use on the locust posts of the post and rail avenue fencing, bringing a color to the parkscape that would seem foreign to visitors today. The paint combined a proportion of red lead and dark red mineral paint mixed with oil. The company also created a bronze green and a permanent black for use on the new gun carriages. The commission had the five observation towers painted using the same three colors, with the red adding decorative highlights, the plan of which can be seen on the original tower blueprints. Painting the fence posts, in particular, demanded so much labor that at least one man was always on duty at the task just to keep everything in order.¹³⁹

The final section of Cope's report explored piked roads. By the time Cope made his research trip the park had already begun to construct permanent park avenues using the Telford system. Telford construction was adopted, said Cope, because the commission recognized the "importance of a firm, solid, and well-laid foundation." Cope made the journey to study roads in York, Lancaster, and the Philadelphia suburbs already convinced of the superiority of Gettysburg's avenues; everything that he saw on his journey confirmed his bias. Quality roads were rare enough in the 1890s that anyone who tried to build them inevitably faced learning through experience and experimentation. Extensive public road-building was so new that the State of Pennsylvania did not have a highway commission until 1907, and as late as 1914 one writer would call American roads "the worst of any civilized country in the world."¹⁴⁰ Cope's findings offer glimpses into late nineteenth century road technology in Pennsylvania,

¹³⁹ The lead paint on the gun carriages is one of the main reasons that the Gettysburg staff cannot do some of the initial maintenance on the gun carriages today. They need to send them away to have the paint removed, then complete the restoration work at the park.

¹⁴⁰ Henry B. Joy, "Transcontinental Trails: Their Development and What They Mean to This Country," *Scribner's Magazine* 55, (February 1914): 160. Joy was president of the Lincoln Highway Association.

particularly those roads that were considered exceptional in their day. Cope's subsequent decisions on the avenue system at Gettysburg show the lingering effects of his early study, and that he was always willing to work to improve his avenues, to keep them worthy of the battlefield that they helped to interpret.

Cope began by speaking with J. U. Fitchey, a contractor who built the roads around York and, at the time of their meeting, was building the roads around Lancaster. The man had traveled to England, Scotland, and France and assured Cope that every pike he saw had a solid clay top layer to bind the surface, which prevented the coarser material from coming up. He insisted that a properly built road required no subgrade drainage because no water could penetrate the solid-packed surface. Dr. Filbert, of Philadelphia, openly disagreed with Mr. Fitchey that no binder was necessary in macadam or Telford Roads. His secret to good roads was to "keep the surface wet for a month and roll well, keep it wet after the road is in use, don't let it get dry, and roll, roll, roll." Filbert criticized the commission for its use of a clay surface on the avenues already constructed, because all that needed to be done was to keep the surface wet and rolled. Cope had gone to Dr. Filbert to inquire about cobble stones as a gutter material, and received opinions and advice about every aspect of road building because Filbert "expressed a willingness ... to tell me everything he knew about the subject." Filbert convinced him that the granite around Gettysburg was perfectly suited to the avenue's needs, a suggestion that the commission followed, especially when it discovered that it would need gutters along nearly every mile of avenue constructed.¹⁴¹

"This report is without bias or prejudice," concluded Cope, "as anyone can see for himself if he can take the trouble to go there." Cope explored the roads from the windows of suburban trains and inspected several miles of the piked surfaces on foot. Regardless if the piked roads had been there for one year or ten, wrote Cope, "in no case is the surface superior to the surface of Hancock Avenue, I found no gutters on them worthy of the name, none paved except such as I have mentioned, I found but one underpipe, but that was through an embankment, I did not find any catch-basins." What the other piked roads lacked, Gettysburg

¹⁴¹ Emmor B. Cope, *Report Upon Piked Roads*, April 1897, GNMP - Archives.

had, and soon the park's avenues became famous for both the quality of construction and the meticulous care of them by the commission. The roadways were not constructed for commerce or local traffic; they were a commemorative feature to aid interpretation of the battlefield.

Aside from judging them the finest roads that it could build on the battlefield, and that it had promised "the best result in solidity and durability," there is no clear explanation as to why the "commission decided to build Telford roads at Gettysburg. Telford roads were named for Thomas Telford, who was born in 1757 in Dumfriesshire, Scotland. Telford turned his skills in stone masonry to building bridges and roads. Rather than building a road that would be just solid enough for the traffic it might bear, Telford designed a stone road capable of withstanding the heaviest anticipated loads, which required a thick, solid base of quality stone. If the base stone were not strong it would soon crack and shift under heavy use. A Telford road consisted of a bottom layer of hand-placed stones, 7" thick. This was followed by another 7" layer of smaller stones, each no larger than 2", and finished with a 1" layer of gravel. The first 7" layer was known as the Telford base and determined whether or not one was building a Telford Road.

The Gettysburg National Park Commission approved Cope's plan for a modified version of the Telford system, giving it a more solid base, but a less substantial secondary layer with the addition of a thin layer of clay. In the commission's 1895 annual published report to the War Department, Nicholson presented the details of the avenue's construction:

The stone used is Syntentic Granite and Iron stone, very hard and of excellent quality. A foundation pavement of 8 inch wedgelike stones set on edge and well knapped and chinked; on this 4 inches of stone 1 ½ inches in size; then a slight layer of clay as a binder, and finally a top-dressing of one or two inches of quarter inch stone screenings; the whole rolled thoroughly with a Steam Roller weighing 14 tons; side and under drains are placed where needed.

Much expense went into constructing the avenues under the Telford system and the commission needed to justify the value of such expensive roads, especially since every dollar received was through appropriations. "The results of the above method and

processes," concluded Nicholson, "are roadways smooth and solid and which will last for generations." The decision to add the layer of clay came through trial and error. Without a binding layer of clay the upper layer of screenings sank into the crevices of the foundation.

Photographs that accompanied the annual reports reveal a slightly more complicated process than what Nicholson described, especially when constructing new avenues. Once the battle line was determined and surveyed, work crews began cutting away timber and removing large rocks and boulders. They only removed those obstacles that interfered with the roadway itself, leaving all others as potential and known relics of the battle. Crews of men hammered at the boulders by hand, gradually breaking apart the granite into sizes useful for constructing the avenue. The broken stone was piled alongside the roadbed for future use. The commission kept a small structure for storing dynamite and hired a man skilled in the use of the explosive, so it is likely that dynamite was also used to remove obstacles.¹⁴² The men then excavated the roadway 12" deep and rolled the subgrade until it was packed and smooth to give the entire road structure a solid base. The foundation of the roadway was laid as compact as the crew could make it, with larger stone creating a solid edge to prevent any horizontal shifting when the roadway was complete. Horse and carts hauled the stone wherever required, with the horseman, his cart, and his horse hired as one unit. The addition of the 1-1/2" stone brought the roadbed level to the road shoulder. The entire road was constructed with an elevation at the center from 3' to 5' higher to aid drainage, but the 4" layer showed the greatest differentiation from the center to the sides. The final layers varied on some of the avenues due to Cope experimenting with wearing surfaces. All received a "coating of clay," but some were topped with 1/2" limestone screenings, others with 1/2" to 1-1/2" granite screenings, and some both. The early surfacing of Confederate Avenue, Sections 4 and 5 had a coating of clay placed between two layers of screenings. The experiment must not have been successful because the process was never repeated. Screenings were small stones made in a stone crusher. As avenues were gradually completed and needed only maintenance, the commission ordered screenings by the

¹⁴² Agreement of Employees of the Gettysburg Park Commission, GNMP-Archives.

ton from outside contractors.¹⁴³ Finally, the avenues were rolled again and again. Regular maintenance included the addition of new screenings when necessary and rolling in damp and wet weather.

The Gettysburg National Park Commission became a source of steady employment for many men in the Gettysburg area. The GBMA had made being a Civil War veteran a priority when hiring workers, and many veterans had worked for the commission, especially in the early years.¹⁴⁴ However, by the time that the commission began to need steady labor, many veterans were too old for the kind of work required of them. Most of the men signed an informal contract to work whenever work was available and at whatever task required, earning 12 1/2 cents per hour, a pay-scale that did not change for over a decade.

The work agreements reveal the types of labor that the commission required related to the construction and maintenance of the avenues. One man agreed to rebuild stone fences as well as to cut the grass along the avenues. J. H. Waddle's compensation for his work was "the grass upon said land," which meant that he not only tended the grass, he removed it from sight and neatened the avenue landscape. At the same time he committed to "remove weeds briars and clear the avenue as I go." Unable to bear the cost of keeping more than one horse and carriage for the commissioners, Cope hired J. Tate Bayly at 20 cents per hour "for myself and one horse" and 30 cents per hour "for myself and two horses and wagon

¹⁴³ Photographs of avenue construction are available in the published volume *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War, 1900*. The later annual reports, from 1905-1922, did not appear to be published with photographs. Emmor B. Cope created detailed blueprints of each of the avenues and included cross-sections on the plans. In 1905 he created a blueprint of twelve cross-sections, offering a comparison of their widths, materials and gutters. The plan has been reproduced by the Gettysburg HAER team as sheet six.

¹⁴⁴ "Account Book of Employees," GNMP - Archives. Kathy Harrison has compiled a list from the Account Book of the employees, their years of service, and park duties. It is available through the GNMP - Archives, File 11-34, "Biographical Information: Park and Related Gettysburg Personalities."

to furnish a one horse wagon and cart when desired." Other work agreements show that no matter what the dangers of the job, the employees were responsible for their own safety. Luther Butler agreed to work as long as it took him to "blast a boulder ... and some other rocks" on Section 7 of Confederate Avenue; despite the dangers, his hourly pay was the same as the regular laborers. In 1900, John W. Stevens accepted the job to operate the commission's 6-ton steam road-roller "at any hours of the early morning through the day and late evening and in wet weather, when the avenues are in the best condition to Roll." As early as 1895 the commission began to hire guards to keep an eye on the avenues and battlefield against vandals and reckless drivers, although they also served as good sources of information for the visiting public. The first park employee's name was entered on 8 July 1895 with a firm script and the final handwritten entry appeared on 12 May 1927, entered just two weeks before Cope's death, and reflected an aged version of the same hand.¹⁴⁵

The commission advertised for bids whenever they needed work completed in the park that could not be done by their own laborers. Most of the War Department avenues at Gettysburg were piked by M. & T. E. Farrell, contractors from West Chester, Pennsylvania. Cope made certain to oversee every aspect of the construction, demanding that all work not done to specifications be done over. One of Cope's nephews later met Mr. T. Farrell in the streets of West Chester and reminisced about Cope's unwavering quality control. During construction of one of the early avenues, Cope had been called away on business but the contractor proceeded to construct a quarter mile of the avenue. Upon meeting the man the next day prior to work, Cope informed Farrell, "I have been out there before you were up this morning, I dug up a section of it, now you get your men out there and dig up all of that section and rebuild it according to the specifications which I gave you."¹⁴⁶

¹⁴⁵ J. H. Waddle, 16 July 1895; J. Tate Bayly, 12 July 1897; Luther Butler (also spelled Beitler), 25 April 1898; John W. Stevens, 13 April 1900; Henry F. Slonaker, Robert M. Elliott, and H. J. Brinkerhoff, 23 July 1910, *Agreement of Employees of the Gettysburg Park Commission*, GNMP - Archives.

¹⁴⁶ "Participants' Accounts," Vertical File #5, GNMP - Library.

Cope was impressed by the machinery used by Farrell in the construction of the avenues, particularly the 25,000 pound steam roller used by the contractor to compress the roadbeds and the finished avenues. Cope discovered within a year that the commission would need to purchase a roller for regular park use rather than to continue to hire one whenever needed. The avenues required regular maintenance to replace lost screenings and to repair the depressions caused by wagon wheels. The commission in 1896 purchased a light steam roller, weighing about 6 tons, from the O. S. Kelly Company of Springfield, Ohio. No sooner had the commission acquired the machine than Cope determined that it also needed a building to store it in "before bad weather sets in." The red brick storage building, located at the southwest corner of Taneytown Road and Pleasonton Avenue, was not completed for several years, finally being announced in the 1903 Annual Report. This building serves as a core of the current expanded maintenance facilities for the park, at the same location. After seven years of strenuous use the roller needed to be significantly rebuilt because "use in present condition [was] unsafe to life." The commission made due with the modified roller until 1906-07 when Cope drew plans and specifications for a new one to be constructed by the American Foundry and Machine Company, of Hanover, Pennsylvania.¹⁴⁷

As mentioned earlier, one of the greatest obstacles in constructing the new avenues and realigning the old was obtaining the rights-of-way, which the commission was forced to do by negotiating with individual landowners. By purchasing "odd lots," however, the work of the commission became laborious and the proceedings quite public in Gettysburg. No avenue illustrates the complications of the process of acquiring land for the avenues better than the construction of West Confederate Avenue, which in 1894 was simply called the "principal Confederate Avenue." Issues surrounding the avenue revealed many of the public perceptions of the federal government assuming control of the battlefield development. Complications arose at nearly every stage of the battlefield's growth, not all of which can be covered in the scope of this report. The commission, to

¹⁴⁷ Emmor B. Cope, *Annual Report of the Engineer to the Gettysburg National Park Commissions*, 1895, 9; 1896, 8; *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War*, 1903, 91; "Approvals and Requests," 1906, GNMP - Archives.

fulfill its obligation to oversee the marking of the Confederate battlelines and constructing avenues accessing those lines, turned to the lands encompassed by the present day West Confederate and South Confederate Avenues first. It divided the proposed avenue into eight sections, finishing those along South Confederate far in advance of those on West Confederate because of property disputes.

The lengthy court proceedings that ensued over the property illuminate local individuals' voices in the debate as well as perceptions about the land and its contents changing value as the battlefield park developed. Land that had been considered worthless because of the stone it contained suddenly became valuable because of that same stone, which was used extensively in erecting the monuments, building the avenues, and paving the streets, alleys and gutters in the borough of Gettysburg. During Circuit Court proceedings in *The United States of America v. Five Certain Tracts of Land*, Mr. Sherfy declared that the construction of Confederate Avenue would not only cost him the seven acres of land, but the future use of the stone upon it. The supply of "iron stone" on his land was declared "inexhaustible" and that "there was no end of them," and that he should receive no less than \$400.00 per acre. Other complaints regarding the lands along the proposed Confederate Avenue expressed concern over being cut off from farm entrances and the inadequate fences designed by the commission for containing cattle. Emanuel Plank, called to testify on behalf of Sherfy, knew first hand the cost of cattle getting into other people's property and could only anticipate the fines his fellow farmer would face when his cattle destroyed the avenues due to the commission's own inadequate fences. Sherfy had long depended upon money gleaned from his property for battlefield purposes, having sold fifteen monument plots at \$50.00 each, stone for monument bases, and even granite to M. & E. T. Farrell for avenue construction. One of his greatest harvests from the land, however, also seemed to be the battle relics that he had collected there and then sold from a stand along the Emmitsburg Road for an annual income of several hundred dollars. "I think that after that avenue is built," he said, "that the travel that goes by way of my property on the Emmetsburg Road will follow the avenue. . . I have lived on this battlefield for 33 years and I know pretty near how these things

go here."¹⁴⁸ Construction of West Confederate Avenue did not begin until December 1900, with the avenue finally completed in August 1901. Local sentiment on land acquisition seemed to be divided. Many, like Sickles, benefited in many ways from the development of the battlefield park but just did not want to cooperate in aiding that growth when it affected their own property. Local papers asked that the community not hold out for ridiculous sums for their property and force the commission into costly litigation. "These condemnation proceedings are not to their personal interest," the writer noted. "We suppose they gladly would be rid of them if they could. But they have been entrusted with a definite work, and they must take the course they deem best in the interest of the Government."¹⁴⁹

Several years later Nicholson faced similar difficulties when trying to acquire the land for Birney Avenue, surrounding the south and east sides of the Peach Orchard. The GBMA first proposed an avenue access around the orchard itself in 1884. The landowners refused to part with the property for less than \$1,000.00 per acre and the courts agreed with that amount, which the GBMA refused to pay. Not one to leave his landmarks uncommemorated, Sickles wrote to Nicholson in 1904 to complain about the lack of attention to acquiring that section of the battlefield and constructing an avenue for access. "Do you propose to acquire this land?" asked Sickles, reminding Nicholson of the role that the Peach Orchard played in the Battle. Nicholson displayed his trademark patience and the endless obstacles encountered in marking the field, and responded "you will doubtless recall," that the Memorial Association had refused to pay the \$1,000 per acre and that the two subsequent owners (heirs) held to that price for the commission.¹⁵⁰

¹⁴⁸ *The United States of America v. Five Certain Tracts of Land Situate in Cumberland Township, Adams County, in the State of Pennsylvania, Tract 4, Philadelphia, 25 February 1897, in "Transcript of Court Proceedings," GNMP - Archives.*

¹⁴⁹ "The Gettysburg News, Battlefield Land Condemnation," *Star and Sentinel*, June 1903, Gettysburg Newspaper Clippings, vol. 4, 159, GNMP - Archives.

¹⁵⁰ Daniel E. Sickles to Nicholson, New York, 16 June 1904; Nicholson to Sickles, Gettysburg, June 1904, John P. Nicholson, *Letter Book and Journal of Colonel John P. Nicholson*, GNMP -

No sooner did the commissioners begin to build wide, solid, and meticulously maintained avenues then they began to look at the public roads that connected the avenues. The public roads became extended avenues, but stretching only as far as the Sickles boundary.¹⁵¹ When the commission took over the care and maintenance of the local roads, part of its reasoning was to offer a public service in return for the loss of tax revenue that the federally owned property otherwise would have generated for the community. While being somewhat magnanimous, the reasons behind wanting to control the local roads was to make them passable for visitors to the field, to create a system of good roads throughout all points of the field without having to obtain all of the lands through condemnation proceedings. The commission expended so much energy and money on obtaining the rights to the Confederate avenues and other lands deemed vital for preservation that fulfilling the whole of the plans as laid out in 1895 became an impossibility. When possible, the commission purchased land outright, often paying far more than it wanted in order to "prevent them from being put to uses such as are contemplated by the owners, which would seriously mar and disfigure the park and battlefield."¹⁵²

In 1895 Cope reported to the commission on the condition of the local roads, which, with three exceptions, were "very rough at all times, exceedingly dusty in dry weather, deep with mud in wet weather, and in a general bad condition eight months in the year." Unable to acquire all the land right away that it desired for a complete avenue system, the commission viewed the public roads as useful links between the avenues, but links in dire need of improvement. Cope hoped that by improving the roads that traversed between the avenue sections that the Borough of Gettysburg would "no doubt do their duty by attending to their

Archives.

¹⁵¹ The legal complications of taking over and maintaining these roads and their gradual transference back to the town is outside of the scope of this report. The process and the effects of the government taking over the roads was complicated and merits further study.

¹⁵² Nicholson, *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War*, 1900, 63.

own roads and streets."¹⁵³ The process of completing the work on these roads took about as long as completing the avenue system. In 1906, Nicholson's Annual Report announced that the Secretary of War, pursuant to an act of Congress, had authorized the commission to pike 12.9 miles of public roads. By 1908 the commission began to see the benefits of its investment, revealing the public service it was providing to the community.¹⁵⁴

Most of the stone for the avenue, public road, bridge, culvert, and gutter construction came from local quarries or directly off battlefield land, such as from a quarry near Powers Hill, off Big Round Top, or was purchased from local farmers' land. From 9 January to 24 June 1900 Jacob Solt was paid \$396.70 for filling the quarry hole near the Trostle farm on United States Avenue, although Cope's note in his Avenue Log does not say what Solt was expected to fill it with or from where the fill would come.¹⁵⁵ Mr. Sherfy, whose farm was located along the Emmitsburg Road, sold granite directly off his fields to the commission as well as to the town of Gettysburg for avenue and road construction. Most of the bases for the monuments were also from the local lands because the granite was solid, easily attainable, and held the symbolic value of having come from battlefield lands.

A more elusive yet vital ingredient for avenue construction was water to dampen down the avenues for rolling during construction and as a part of regular maintenance and dust prevention. Dr. Filbert, of Philadelphia, had suggested that the commission bore several artesian wells for use on the roads, especially if the cost of purchasing water from the Gettysburg Water Company was prohibitive. In his 1897 report Cope requested that the commission find some affordable means of dampening the avenues, if only Hancock Avenue. "If it was thought advisable to use the Borough Water," wrote Cope, "a pipe could be laid to Hancock Avenue where the pipe lays nearest on the Emmitsburg Road, and an upright branch to fill the sprinkler." Cope anticipated needing

¹⁵³ Cope, *Annual Report of the Engineer*, 1895, 8, GNMP - Archives.

¹⁵⁴ Nicholson, *Annual Report of the Gettysburg National Park Commission*, 1906, 4-5; 1908, 4, GNMP - Archives.

¹⁵⁵ Emmor B. Cope, *Avenue Log*, 1893-1924, 67, GNMP - Archives.

to sprinkle the avenues once every three days in dry weather, and that they could fill their 450 gallon tank for only 9 cents a tank, making city water more economical than drilling their own wells. By 1910 Cope purchased a sprinkling cart from the Studebaker Company for use on the avenues.¹⁵⁶

Water, however, soon proved inadequate to handle the dust stirred up by regular avenue use and by 1910, the commission had to turn to oils and chemicals to control the dry surfaces, particularly when automobile use increased. The commission turned to the use of "Tarvia" and crude oil on the avenues and those public roads under its jurisdiction. Although it is not clear what the problems had been with the use of those products on the roads, Nicholson informed the War Department that the "experience of the Commission does not justify the use of either Crude Oil or 'Tarvia' on the avenues," and began to consider alternative road treatments. In May of 1913, in preparation for the fiftieth anniversary of the Battle of Gettysburg, Nicholson contracted with The Dustoline for Roads Co., of Summit, N. J., to cover 8 miles of the avenues, both providing the materials and applying the product. The cost for 16,000 gallons of Dustoline came to \$1,640, and became another in a long line of maintenance expenses on the avenues. The commission continued to use products like "Tarvia" and oil on the avenues throughout the rest of its years at Gettysburg as one of the few ways to combat the excessive dust stirred up by automobiles.¹⁵⁷

Integral to the commission's commemorative landscape and avenue system at Gettysburg was the addition of formal fencing, towers, and bridges. Aside from the variety of fences that appeared around the farmsteads and between fields, the commission added miles of post and rail fencing to enclose government land and pipe and rail fencing along the avenues. The commission tried, whenever possible, to replace and restore fencing that had been a part of the battlefield landscape, particularly the stone fences. The type of farm fencing in any given area depended upon the terrain and the types of readily available materials and included

¹⁵⁶ Cope, *Annual Report of the Engineer*, 1897, 5; "Approvals and Requests," 1910, GNMP - Archives.

¹⁵⁷ Nicholson to Assistant Secretary of War, Gettysburg, 4 June 1913, and Fred L. La Rowe to Nicholson, 22 May 1913, Summit, NJ, "Approvals and Requests," 1913, GNMP - Archives.

picket, post and rail, Virginia worm, stone and rider, stone, barbed wire, and slab board fencing. The GBMA had made extensive use of barbed wire fencing along the avenues, which the commission found distasteful and gradually replaced with its own characteristic fencing. Cope designed a sturdy fencing made of locust posts and four 1" gas pipes. Local farmers objected to the new fencing for fear that it would not be strong enough to keep their cattle out of the avenues. The commission rejected such complaints, calling the fences "very strong and handsome," but did add two rows of galvanized wire between the lower pipes to hold in smaller farm animals. The design suited the commission as well because it was "inconspicuous to the sight and therefore does not mar the view of the field."¹⁵⁸

Several men from the Gettysburg region put in bids to provide the materials and labor of erecting the chestnut post and rail and locust post and pipe fencing. Mr. Pepple and Edward Naugle appear in the records as having supplied many of the posts and rails for the War Department fences. In 1896, the 2410' of post fence along Sickles Avenue cost \$180.75 for supplies and labor. In contrast, 4800' of locust post and pipe fencing erected on Hancock Avenue in November of 1900 cost \$1852.80, five times more than the post-and-rail fencing. The posts that he provided for the park, recalled Naugle, measured 7' to 7-1/2' in length and 8" wide, and were tapered from 4" at the ground level to 2-1/2" at the top, and were placed 2' to 2-1/2' in the ground. Charles W. Zeigler worked as a carpenter at the park for eighteen years and erected thousands of panels of fence. From his experience, the average life of a dead chestnut post was three years and that a seasoned locust post was good for thirty-five to forty years, which can help to explain part of the expense of the galvanized pipe avenue fencing. Most of the round posts for the pipe fencing were cedar and locust.¹⁵⁹ Iron caps topped each of the posts, preventing water from getting into the wood and adding

¹⁵⁸ *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War*, 1896, 30. For plans for the avenue fencing, see blueprint Nos. 102-105, 135, and 136 for fencing types under consideration and used in the park, GNMP - Archives.

¹⁵⁹ W. H. Allison conversations with Edward Naugle, Harvey Felix, and Charles W. Zeigler, Gettysburg, 8 August 1940, File 2-26b, Historic Fencing, Folder #2, GNMP - Library.

another formal element to the fence. While none of the locust post and pipe fencing remains, the National Park Service recycled some of the pipe for use with cement posts, and it still appears in the outlying areas of the park, such as along Rock Creek and Coster Avenue.

Within two days after the commission was given full authorization over the battlefield by Congress on 4 February 1895, Cope had completed designs for observation towers to be erected at strategic points on the battlefield. The five steel towers, placed at key observation points, were integral to the original design plan for the park and its avenue system. Prior to the enabling legislation the scope of the commission's work had been to design the avenue features, such as road surfaces, culverts and bridges. As soon as Gettysburg became a national park, however, Cope began to design the towers as signature features worthy of a national park. The addition of the towers took the plan of the park beyond simply fixing the battle lines with avenues, markers, and monuments to acknowledging the greater scope and significance of the battle for veterans and for the American public. The placement of towers in Zeigler's Grove, on Big Round Top, Warfield Ridge, Oak Ridge, and Culp's Hill provided park-wide complementary views of the battlefield for use by tourists and those visiting the park for tactical military study. In a sense the towers became vertical avenues, allowing access to an understanding of the battlefield that ground level study of battle could not supply. From the tops of the 60' and 75' towers, one could see the lines of avenues across the land, creating all the more the effect of the avenues and the battlefield monumentation as a grand object map.

Prior to his Annual Report to the commission in 1895, Cope visited the Quirauk Tower, near Pen Mar, Pennsylvania, for ideas about creating his own tower design for Gettysburg, which shows, like his search for other basic infrastructure designs, that he was inspired by public parks. The tower belonged to the Western Maryland Railroad Company, which also revealed the connection of the towers to the most innovative transportation designs of the day. Cope had borrowed the plans of the tower, and when he returned the plans to the railroad's general manager, he enclosed prints of the Gettysburg Towers. The 60' and 75' towers, despite their height difference, were engineered similarly. Each was sited on a prominent elevation, and mounted on a base of Gettysburg granite block pedestal foundations secured to the bed-rock. Mr. Hood responded to the design for both its practical

and decorative merits stating that Cope had "certainly struck upon handsome designs," and that they "would prove a valuable addition to the attractive features of the Gettysburg field."¹⁶⁰ In April 1895, the commission accepted the lowest bid from the Variety Iron Works of Cleveland, Ohio, to construct four towers, with the fifth being added shortly thereafter in Zeigler's Grove, near the northern end of Hancock Avenue. The Variety Iron Works Company advertised itself as boiler makers, machinists and founders who built steel bridges and buildings. The design for the Big Round Top and Zeigler's Grove towers included planned trail systems to access those key points, and was the first time that the park had a planned pedestrian trail system rather than random pathways worn by frequent use. The trail through Zeigler's Grove led from the National Cemetery and through the park, with the view from the tower allowing visitors to see the connection between the rows of Union dead and the fields in which some of the heaviest fighting took place.¹⁶¹

In August 1895 Cope reported on the progress he and his men had made in preparation for the towers. "I have finished setting the templets for all the towers," he wrote. "On Culps Hill I struck Solid rock for three tower supports, all are near the Surface I will have the rock surface leveled and bored two feet deep ... with 1 ½ inch holes." The ends of the bolts were split and wedged in the bottom of the holes, then "filled full of melted brimstone" and each capstone bedded upon the rock with Portland cement.¹⁶² Cope had the towers constructed of wrought iron and steel, shaped square with the four main column supports gradually tapering inwards from the base to the observation platform. Transverse and diagonal bracing secure the tower, and the stairway winds around the inside perimeter of the tower, with each turn meeting at a platform landing. The canopy hip roof

¹⁶⁰ J. M. Hood, Western Maryland Rail Company, to Cope, 5 November 1895, "Observation Towers: GNMP," File #906, GNMP - Archives.

¹⁶¹ Cope, *Annual Report of the Engineer*, 1895, 9, GNMP - Archives.

¹⁶² The War Department blueprints for the towers include Nos. 83, 85, 96, GNMP - Archives. Cope to Nicholson, 16 August 1895, Gettysburg, "GNMP: Observation Towers," File #906, GNMP - Archives.

shelters both War Department and more recent interpretive details.¹⁶³ The five towers were constructed between 1895-96 for a total of \$12,047, the 75' Zeigler's Grove tower costing \$3,260.00 compared to the \$2,196.75 each for the other four after the Variety Iron Works Company realized that they had not made any profit on the other towers.¹⁶⁴

The commission planned to build a sixth tower in East Cavalry Field, but never received authorization from the War Department. The first mention of a sixth tower appears in 1897 when the commission advised the War Department on the importance of the construction of avenues from the main battlefield to East Cavalry Field in order to enable visitors to understand the battle. In 1905 Cope wrote to the Variety Iron Works requesting information for another tower, "asking them to give me a rough estimate for building a Tower on our latest design such as Erected at Zeigler's Grove" for East Cavalry Field. Eleven years later, in 1916, Cope once again expressed his concern over the lack of a tower in that field, and that perhaps of all of the battlefield sites, it needed one even more than where they had already been constructed. There were high summits and ridges on the field that offered clear views of the field, but, wrote Cope, "there are no such elevations on the East Cavalry Battlefield, the Field

¹⁶³ For technical details on the construction of the towers, please see the following study. The park recently had an engineering study completed on the Culp's Hill, Warfield Ridge (West Confederate Avenue), and Oak Ridge Observation Towers to assess their current conditions and recommendations for restoration. "Observation Tower Evaluations at Oak Ridge, West Confederate Avenue, and Culp's Hill, Engineering Study prepared for the Gettysburg National Military Park, United States Department of the Interior, National Park Service, prepared by C. S. Davidson, Inc. Consulting Engineers, Gettysburg, Pennsylvania, 16 February 1998, Engineer's Project No. 3237.8.02.00, GNMP.

¹⁶⁴ Cope to the Gettysburg National Park Commission, Gettysburg, 1 September 1916, "Observation Towers: GNMP," File #906, GNMP - Archives. There is some discrepancy in Cope's records of how much it cost the commission to construct the towers. In his Avenue Log, Cope records that the 75' Oak Ridge tower cost \$2,469.10 to construct in 1895, which would mean that the Zeigler's Grove tower of the same height was an additional \$790.90 to build the following year, not \$1,063.25.

of occupation on the Cavalry battle ... is a plain." Cope did not even ask for one of the taller towers for the field, writing that "a Tower in that Field 60 feet to upper floor would be a great advantage to those visiting and making a study of that Field."¹⁶⁵ The determination of the commission to get a sixth tower and permanent avenues for East Cavalry Field emphasizes how the commission regarded the towers as integral to the overall avenue system and commemorative landscape. In fact, the battlefield landscape could not be complete without the addition of that tower and remained a continuing regret to Cope and the commissioners that they never fulfilled their promise to fully mark the battlefield for future visitors.

The Philadelphia Planning and Service Center rehabilitated the towers in 1960s. According to a recent engineering study on the towers, the work included the "complete replacement of the original stairs, railings, observation platform, interior floorbeams, and stringers." Remaining are the floor girders and exterior floorbeams, in addition to the basic structural members. The engineering study does not highlight other elements of the original towers that also survive, such as the circular iron bench and the direction tablets that surround the flag staff and were added within a few years after the towers were built. When Cope was requested to show Nicholson the blueprints for the direction tablets, Cope explained that they were one-of-a-kind, which makes these elements of the towers as irreplaceable as the battlefield monuments. "There is no print of the tablets on the flag staff of towers, no two are alike," reported Cope. "The pattern had to be set up on the tower and the lines of direction marked on the pattern, then taken down and the points and lettering put on."¹⁶⁶ Also intact on the structures is the round, 10" diameter, Variety Iron Works construction label. The seriousness with which the commission regarded the towers is reflected in the 12" x 20" iron warning sign that still greets visitors after they climb the first set of stairs. The sign reads, in block capital letters: "Notice/ Any person writing upon/ or otherwise defacing/ this tower/ will be arrested/ and

¹⁶⁵ Cope to Nicholson, Gettysburg, 6 July 1905; Cope to the Gettysburg National Park Commission, Gettysburg, 1 September 1916, "Observation Towers: GNMP," File #906, GNMP - Archives.

¹⁶⁶ Cope to Nicholson, 16 July 1906, Gettysburg, "Observation Towers: GNMP," File #906, GNMP - Archives.

liable to a fine of/ five hundred dollars." The commission was equally protective of all of its efforts, but few of the notices remain. A most noticeable design change that affected the character of the towers was the removal of the decoratively pierced sheet metal railing enclosures that wrapped around the tower with the stairs and surrounded the tower floor. These were replaced with solid sheets of metal. The towers are now painted battleship gray, showing no evidence of the multi-colored paint scheme that Cope had planned.

The tower on Zeigler's Grove was removed in 1961 when the Cyclorama superseded it on Cemetery Ridge. By 1968 the Big Round Top tower was deemed dangerous and obsolete. The NPS did not think that it received enough use to warrant repairs, which were constantly needed due to the damage from high winds. In 1978, Thomas Harrison, then Chief of Planning and Resource Preservation, fully expected the remaining three towers to also be removed because few people were willing to get out of their cars and "climb the seemingly endless stairs," and because he determined they were no longer necessary to understanding the battle because "various interpretive devices and the availability of published literature and maps of the battle have made the towers unnecessary."¹⁶⁷ Although encroaching vegetation now obstructs some of the viewshed, the remaining three towers still offer an unsurpassed visual link between significant points on the battlefield and stand as monuments to the work of the commission.

Whereas the towers provided a visual link between sections of the battlefield, the avenue bridges and culvert bridges allowed visitors to the battlefield to journey from section to section of the field without sinking into the many swampy areas near small runs and creeks. Cope designed four main types of bridges and culvert bridges for use on the avenues and others for use on the public roads. The culvert bridges, as described above, were inspired by bridges in Fairmount Park, Philadelphia, and remain on Brooke, West Confederate, and East Confederate Avenues, with only one removed from East Confederate Avenue in the 1930s. The Reynolds Avenue railroad bridge, also described above, was the only one of its type constructed and was replaced in the late

¹⁶⁷ Thomas J. Harrison to Thomas E. Neville, Gettysburg, 31 January 1978, "Observation Towers: GNMP," File #906, GNMP - Archives.

1950s, after more than fifty years of service. The first two War Department bridges appeared in 1895, crossing Plum Run on United States Avenue and Section 7 Confederate Avenue, which is now called South Confederate Avenue. Nicholson described them as "massively built of Gettysburg Granite," with deep foundations, a steel superstructure of 6' I-bars weighing 15 pounds per foot. The roadways were 22' wide and covered with 3' oak planks, with cap stones on the abutments and iron railings. Bridges of a similar design appear on Crawford and Warren Avenues, with all still surviving, although in slightly altered form, except the bridge on South Confederate Avenue, which was replaced by a Civilian Conservation Corps construction crew under the direction of the National Park Service. The sides of the bridges taper inward from the foundation to the roadway, with some of the wing walls horizontal to the ground and others sloped slightly downwards. On some bridges, as well, the wing walls abut the bridge span at the bridge span, whereas the others are at the far ends of the structures. The railings consist of five to seven flat iron rods, depending on the overall length of the bridge, with three rows of the same flat rods serving as guard rails. The oak plank flooring was replaced several times and paved over, and ultimately entirely removed, but otherwise most of these bridges retain much of their historical integrity.

The commission also constructed two bridges that resembled the culvert bridges, one on West Confederate Avenue, over Spangler Run, and one on East Confederate Avenue, over Culp's Run. M. & T. E. Farrell, who constructed most of the Telford avenues, also won the bid to build most of the avenue bridges. These bridges were the largest built by the commission, faced with Gettysburg granite in even horizontal courses. In contrast to the culvert bridges, which stretched only 16' along the avenues, the arch bridges were 40' long, yet with the same massive Gettysburg granite shoulders and walls hugging the avenues. A brick arch, three bricks thick, spanned the roadway, over which the commission constructed the same Telford paving system that covered the rest of the avenue. Perhaps because the bridges were the largest in the park they were also the first to be removed as part of 1930s NPS plans to modernize the park avenues, shortly after the NPS received jurisdiction over Gettysburg. The same headwalls that made the bridges so distinctive were considered a roadway hazard once automobiles took over the old carriageways. In 1935 the NPS altered both of the bridges, retaining only the brick arch, but extending them on each side. The West Confederate Avenue bridge received new headwalls, a 30' clearance

for a wider shoulder, and new spandrel walls that incorporated the rustic style favored by the Park Service. For anyone passing over the site of the old bridge on East Confederate Avenue, one could pass by without even knowing that there was a bridge there. The bridge was also widened, and the new spandrel walls laid in a random pattern, but its headwall tops at 6" below the road surface and is practically out of view with a generous covering of grass on shoulder.

The commission in 1909 constructed a severely modified version of the same bridge type that appears on Warren Avenue on Wheatfield Road over Plum Run. The bridge was made of Gettysburg granite but without wingwalls or cap stones; its granite base ascends like steps from the foundation to the roadway. The railing consisted of three vertical flat iron bars connected with one-inch gas pipe. The less impressive structure perhaps reflected a lack of desire to expend money on what was essentially a public road. This bridge has been significantly modified. Four layers of granite slabs have been added as makeshift headwalls, likely constructed during the 1930s from material removed from small culverts and catch-basins. Currently large black and orange warning signs obscure the oncoming views of the bridge, a concession to concerns about the safety of the narrow bridge on a public access road used for two-way traffic. Recent work on the bridge included adding cement on the ground under the bridge, perhaps in an effort to prevent erosion. The bridge on Hunt Avenue, built in 1913, is even less substantial, showing many of the elements but none of the artistry of the earlier designs. Unlike the bridge on Wheatfield Road, Hunt Avenue is not altered much from its original appearance, except that it now has a post and rail railing, some of the stones have shifted, and the level of ground around it seems to have risen.¹⁶⁸

In the Gettysburg National Park Commission's efforts to disturb the landscape as little as possible yet to follow the lines of battle, Cope engineered some compromises. Many of the battle lines followed the contours of the hills and ridges, where the soldiers could establish their best points of defence. Creating

¹⁶⁸ The park also constructed a bridge in 1909 on Hanover Road over Rock Creek in an effort to make the three mile journey to East Cavalry Field less of an obstacle course. The bridge featured two arches with 12' spans and metal bars instead of headwalls.

avenues through these areas to provide visitor access required constructing extensive retaining walls. The materials for the walls mimicked those of the avenue bridges. Depending upon the contours of the land, anywhere from two to seven courses of dressed Gettysburg granite would make up the retaining wall, topped with flat capstones of varying lengths. The guard rail, as on the smaller avenue bridges, consisted of 2" wide, flat metal bars imbedded into the capstones, with 1" holes drilled for two rows of gas pipe. The laborers filled the walled in area, leveled it, and then constructed the road surface as they would any other section of the avenues. The lengths varied depending upon the location, but one of the retaining walls on Sykes Avenue measured 228'. The commission built retaining walls on Sykes Avenue on the approaches to Little Round Top, on Slocum Avenue around Culp's Hill, on Stone Avenue near a small pond, and on Wainwright Avenue. There may have also been a wall on Geary Avenue, near the site of the public restrooms. The NPS removed the walls during avenue realignment on Sykes and Slocum Avenues, and replaced the Stone Avenue wall, although a rustic wood fence now stands between the pavement and the pond. The only War Department retaining wall that remains follows the east side of Wainwright Avenue. A few of the capstones have disappeared from the north end and at least half of the guard rail is missing and twisted. The wall divides the formal landscape of East Cemetery Hill with pasture lands and wooded acreage. The gas pipes that the commission used for the economy and durability so freely on the walls, bridges and fences also appeared near points of interest as hitching posts.

With more and more people visiting the battlefield and time testing the durability of the avenues, the commission soon discovered that in order to protect its avenues, it would have to begin to add more features to the battlefield landscape in order to protect that landscape, including extensive gutters, shell stones, bollards, guard chains and balls, and secure plantings along the avenues. A severe storm on 30 September 1896, in addition to downing and snapping the trunks of hundreds of trees and damaging dozens of monuments, mercilessly tested the avenue drainage system. At first the commission planned only to place gutters along those sections of the avenue with significant grade changes, but within a few years it began a long process of adding gutters to almost all of the avenues. Although Cope determined that all of the avenues needed gutters, he also soon learned that the avenues and gutters could not be constructed at the same time. Since the gutters rested more shallowly upon the ground,

Cope found it best if the surface of the road had settled from construction for more than a year before adding the gutter stone, otherwise the stone was prone to wash and shift, requiring more maintenance.¹⁶⁹ The gutters averaged 30" wide and 3" deep at center. The workers opened a shallow graded trench at the edge of the avenue and closely fitted the nearly uniform stone. The workers would not have been able to use a road roller to firm the gutter bed stone once in place, so all the work was done manually.¹⁷⁰

By July 1900 Cope had overseen the construction of 16,161' of gutters; by 1920 gutters covered over 31 miles. At the beginning of the War Department administration, several miles of gutters had been paved by contract with M. & T. E. Farrell. After a few years of paying the contractor to complete the work, Cope soon found that his own employees did more solid and dependable work at a lower cost. In 1906 the commission opened the quarry near Powers Hill and found the stone there particularly suited to gutter paving stones and close enough to the construction sites to save labor and expense. A force of men lay and tended the gutter paving, but it took another force to quarry the stone. Laborers took the stone out "in plates of proper thickness," then dressed them to the appropriate shape and size.

Yet regardless of the quality of work done, the culverts required high maintenance. Frost heaves pushed the stones out of place, all of which had to be rammed back into the ground. At the same time as employees tended the gutters, they also resodded along the banks. Wherever the sides of the avenues consisted of sloping banks the commission either had them sodded or set with grass seed. Within a year of constructing the avenues, the commission found that banks left unsodded would wash down the gutters and across the avenues. The displaced soil detracted from the parkscape and had to be manually removed from the gutters. Even without the added problems of soil erosion, the commission fought vegetation growth in the gutters, each crevice seeming to invite weeds and grass. Cope had likely already been

¹⁶⁹ Cope, *Annual Report of the Engineer*, 1896, 2; 1898, 4, GNMP - Archives.

¹⁷⁰ References to gutter construction come from Cope, *Annual Report of the Engineer*, 1906, 6; 1907, 7; 1915, 6; 1916, 5; 1919, 9; 1920, 5-6, GNMP - Archives.

overseeing the use of herbicides before he first mentioned its effectiveness in 1907. Every two years, he wrote in his annual report, a party of laborers treated the entire lengths of the gutters, by this time 15 to 16 miles, with herbicide. He does not say what herbicide he used, but it effectively destroyed "all growth in [the gutters] and along the sides of the roadway for the season, or perhaps two years if properly done." The practice continued as long as the War Department controlled Gettysburg. In 1920 Cope offered details of the practice. A mixture of five barrels of herbicide combined with ninety-five barrels of water created enough herbicide to treat each mile of gutter with over three barrels of the solution. Cope found the mixture "effective in destroying any kind of growth" in the gutters.

The NPS removed many of the gutters, preferring a smooth grass road shoulder to the intrusion of stone. In those places that needed to have roadside drainage, the stone gutters were replaced with cement gutters or simply covered with a layer of cement. The use of cement required less upkeep from frost upheavals and was less likely to wash out in heavy rainstorms. The commission had begun to experiment with cement gutters in 1919 after a severe winter storm washed out 1600' of gutters on East Confederate Avenue. To prevent future wash outs, the stones were relayed with cross sections of cement every 20' to hold the paving in place.

One of the incidental benefits of the avenue gutters was to prevent traffic from leaving the roadway. The commission discovered that visitors to the field did not necessarily follow the seven mile per hour speed limit nor the signs requesting that all conveyances "keep off the grass." The speed limit in place allowed for a horse to travel at a good trot and was standard for park speed limits at the time, including Fairmount Park, in Philadelphia. Automobile drivers found the limit insufferable, especially because the avenues were the smoothest roadways around and drivers could not resist going fast. By 1904, the speed limit for automobiles was established at ten miles per hour.¹⁷¹ Rather than suffer their carefully sodded banks to be marred and compacted from traffic, the commission directly combated the

¹⁷¹ War Department, "Regulations for the Government of the Gettysburg National Park, Gettysburg, Pennsylvania, 1904," (Washington, D.C.: Government Printing Office, 1904): no page number, Regulation XIX, GNMP - Archives.

problem of "careless driving off the roadway" by erecting shell stones along curves and near particularly popular sites. The shell stones consisted of low granite pillars topped with 10" or 13" cannon shells, depending upon the location. The design and materials fit with the other features that Cope had created for the park, emphasizing the place of the battle and the weapons of war with the use of Gettysburg granite and cannon balls. "It has been found necessary for the protection of the sides of the avenue bordering on the roadway, particularly on the inside line of curves," wrote Cope in 1899, "to set up posts against careless drivers, 10 inch granite posts set ten inches high surmounted with a 13 inch or a 10 inch shell securely fastened thereon has been found least objectionable."¹⁷² Over several decades the commission erected hundreds of the shell stones to protect the roadsides, but also found them useful to designate pathways, such as the trail leading into Devil's Den. When the site required multiple shell stones they were linked with chain. Zeigler, of Gettysburg, provided the granite bases and Captain C. Gilbert, also of Gettysburg, cast the shells for placement at the top of the granite. Gilbert cast most of the iron gun carriages and tablets on the battlefield, which would have been convenient for placing the constant stream of orders and saved the expense of shipping weighty goods.

Some of the greatest challenges to the Gettysburg National Park Commission and avenue system came from the automobile and its drivers. For the avenues' first decade they received praise as fine carriage ways. The attractions of the developing battlefield and the highly publicized reputation of the avenues seemed to lure tourists and caused such as disruption to the regular maintenance to the field that Nicholson mentioned them in his annual report for 1905. "The fine avenues seem to be a special inducement to large and numerous automobile parties," he wrote, "who persistently disregard the rules and regulations governing the park." The commission discovered that there was a segment of the population that regarded the park as purely for recreation and ignored the more reverential purposes of the battlefield's preservation. Even when motorists followed the speed limit, the weight of the automobiles alone was enough to displace more of the surface materials than wagons and carriages

¹⁷² Cope, *Engineer's Report to the Gettysburg Battlefield Commission*, 1899, 5-6.

had done, although the greatest damage occurred from speeding and driving off the roadway.¹⁷³

By 1911 Nicholson seemed to bemoan the near destruction of the fine avenues; the damage done to them by the automobile had become so constant and costly that the commission had to come up with a solution or else risk ruining the avenues. "The wear and tear of the surface of the avenues by automobiles has become so serious," he wrote, "that to preserve the avenues a good surface preparation will be necessary." Just as Cope had experimented with layers and types of screenings and clay for the avenues when only carriage travel was anticipated, beginning in 1910 he also experimented with surface treatments against the wear of the automobile. The treatment, whatever it was, "seemed to be effective for at least six months."¹⁷⁴ The problems were particularly severe because under the existing park legislation the commission and the park guards had no authority to enforce the regulations of the War Department against "irresponsible guides, chauffeurs, and speeding automobilists."¹⁷⁵

Anticipation for the Fiftieth Anniversary of the Battle of Gettysburg celebration forced the commission to plan for the thousands of vehicles, both motorized and horse-drawn, which would visit the battlefield. For the fiscal year ending 30 June 1914 the commission budgeted \$5,000.00 for resurfacing ten miles of avenues and \$2,000.00 for oiling the surface to combat the increased traffic, which included regular application of limestone screenings to thirty miles of roadway, totaling 1,000.00 tons. During the four days of the anniversary encampment thousands of "machines" passed over the avenues, with 7,147 following the specified route determined by the commission between 5 a.m. and 11 p.m. on 3 July 1913. The best that the commission could report about the four days of constant use was

¹⁷³ Nicholson, *Annual Reports of the Gettysburg National Military Park Commission to the Secretary of War*, 1905, 5.

¹⁷⁴ John P. Nicholson, *Annual Report of the Gettysburg National Military Park Commission to the Secretary of War*, 1911 (Washington, D.C.: Government Printing Office, 1911), 8.

¹⁷⁵ Nicholson, *Annual Report of the Gettysburg National Military Park Commission to the Secretary of War*, 1911, 9; 1913, 12.

that "by care and supervision these avenues have been maintained without great damage."

What seemed to spare the avenues was the foresight of the commission to plan and publish a tour route of the battlefield. Visitors and battlefield guides had likely had their preferred ways of seeing and showing the battlefield but the map prepared for the fiftieth anniversary seems to be the first official guide to the battlefield, although it was created as a means of crowd control, first, and a recommended way to view the battlefield, second. The Fiftieth Anniversary of the Battle of Gettysburg Commission requested 2,000 copies of the tour route map so that copies of it could be published in "every newspaper in Pennsylvania."¹⁷⁶ This wide distribution of maps made public a view of the battlefield that extended beyond noting the movements of troops, instead enforcing the movement of visitors throughout the field. Visitors not on foot were required to travel the avenues one-way from a point beginning at the Center Square in Gettysburg, westward out Chambersburg Street towards the southern end of Reynolds Avenue, through the avenues representing the first day of battle, southward along East Confederate Avenue to the Culp's hill area, southward along Hancock Avenue, and towards West Confederate Avenue along one of two routes, either through Devil's Den and via Sickles Avenue or westward along South Confederate Avenue.¹⁷⁷

Limiting the tour route accentuated problems developing over the sizes of vehicles that wanted to traverse the field and the limitations of the avenues to accommodate them. The Columbia Sight Seeing Company requested permission to operate a sight seeing car that could carry up to twenty passengers over the avenues. Henry Breckinridge, the Assistant Secretary of War, refused the request, pointing out that "machines as large as yours are too cumbersome to move over the twelve foot avenues and the grades over five percent at Culp's Hill and the Round Tops."

¹⁷⁶ Lt. Col. Lewis E. Beitler, to Nicholson, Harrisburg, 6 May 1913, "Approvals of Requests, 1913," GNMP - Archives.

¹⁷⁷ Cope, "Map of Gettysburg Battlefield Showing Routes That MUST Be Taken by All Wheeled Conveyances during the Anniversary Celebration, from June 28 to 30, July 1 to 5, 1913," bound in "Approvals of Requests, 1913," GNMP - Archives.

He feared that the slow movement or breakdown of one such vehicle would "throw the entire movement into chaos and disorder." Nicholson suggested that the specified route be modified for such vehicles, eliminating the Culp's Hill and Little Round Top sections, enabling the company "to comply with the demand of the public," to which Breckinridge agreed.¹⁷⁸ Nicholson could not foresee that this same demand would later convince the NPS to modify the same sections of the avenues rather than simply suggesting alternative routes.

The commission had hired a force of Special Guards for the anniversary celebration, and while their numbers helped to ward off problems, they did not have authority to do more than offer warnings about the violations of park regulations. When regulations for all of the military parks were issued in 1915 the problems of enforcement were still not addressed, but the War Department began to address the concerns over the effects of automobiles on the various National Military Park roadways. Whereas loose cattle and unbroken horses had once been a major maintenance issue, by this time the automobile seemed to be the cause of all anguish. The 1904 regulations had limited the number of people that could be conveyed on the avenues according to the width of the wheel. Carriages with three seats for six people, for example, needed wheels 2" wide, and six seats for twelve people needed wheels 2-1/4" wide, the largest possible carriage wheel required being no larger than 3-1/2". The automobile added issues of weight dependent not upon the number of passengers so much as the bulk of the machine itself. Rather than balancing the number of passengers and tire widths, the 1915 regulations took into account the weight of the conveyance. Any vehicle weighing 1,500 to 3,000 pounds required a 2-1/2" tire width, 5,000 to 15,000 pounds a 5-1/2" tire, and so on. For loads exceeding 35,000 (tire 6" wide) pounds the tire width needed to be an additional 1" for each 5,000 pounds. Automobiles and other motorized vehicles were also required to be equipped with horns, lights, an accurate speedometer, and were now allowed

¹⁷⁸ Henry Breckinridge, Secretary of War, to John A. Korman, Manager, Columbia Sight Seeing Company, Washington, D.C., 25 June 1913; Nicholson to Henry Breckinridge, Gettysburg, 25 June 1913, "Approvals of Requests, 1913," GNMP - Archives.

to run at twelve miles per hour, eight miles per hour approaching and rounding curves.¹⁷⁹

That the automobile had significantly altered the feel and appearance of the battlefield was undeniable to Nicholson, who continued to dedicate much of his life to the effort. "The mode of travel to Gettysburg and over the battlefield, as well as elsewhere over the country, has been entirely changed within 15 years," he wrote in his 1918 Annual Report. "Before the advent of the automobile visitors were taken through the Park in carriages. As many as 100 teams were always on call; it would be difficult to have half a dozen livery teams now; the automobile has so completely taken up this work that it has materially checked the running of excursions. We see the automobile here by the hundreds, sometimes thousands, and from distant cities and states."¹⁸⁰

For the first several years that the commission oversaw the development of Gettysburg it placed its time and money into creating permanent roads. Only later did it begin to "label" the sights and avenues so that visitors to the field not necessarily familiar with the battle or battlefield could discern their location. The growing network of avenues also required a system for the commission and park employees to divide the avenues into identifiable sections for maintenance and law enforcement issues. Each section of avenue was designated a letter that was literally posted on the avenue. This way, when referencing a particularly long avenue, one would note the letter, for example, Section A of

¹⁷⁹ War Department, "Regulations for the Government of the Gettysburg National Park, Gettysburg, Pennsylvania, 1904," no page number, Regulation III; "Regulations for the National Military Parks, and the Statutes under which they were Organized and Administered" (Washington, D.C.: Government Printing Office, 1915), 9-10. The Gettysburg National Park Commission made use of an Agricultural Experiment Station publication to understand the issues around tire widths and the draft of wagons, "Influence of Width of Tire on Draft of Wagons," Bulletin No. 39, University of the State of Missouri, College of Agriculture and Mechanic Arts, Agricultural Experiment Station (Columbia, MO: E. W. Stevens, Printer, 1897).

¹⁸⁰ John P. Nicholson, Annual Report (Washington, D.C.: Government Printing Office, 1918), 8.

Hancock Avenue. Small iron tablets bearing capital letters were placed at 200 yard intervals along the avenues, generally in front of monuments just off the edge of the avenue.¹⁸¹ The letters gradually disappeared and there is no longer a system to designate particular points in the avenue system. When today's radio dispatchers announce the scene of accidents, downed trees, or a nest of bees in the ground, they now must approximate the location according to neighboring monuments or nearest intersections, which can particularly challenge one's skill in knowing the location of landmarks.

Progress on making the battlefield accessible had advanced thoroughly enough that the commission also took steps in 1900 to place small iron inscription tablets at "points of interest" throughout the battlefield. Some of these locations, like Reynolds Woods, had been identified with hand-painted signs since the GBMA days. Key points of interest now identified were the Angle, Loop, Spangler's Spring, Excelsior Field, Trostle House, Bryan House, G. Weikert House, Wheatfield, Devil's Den, Reynolds Woods, Barlow Knoll, Stevens Knoll, Spangler's Woods, Zeigler's Grove, Culp's Hill, Little Round Top, and Oak Ridge. E. B. Cope designed rectangular field inscription tablets, with the names and a border raised in the iron as part of the moulding process. The raised sections were painted to distinguish the lettering from the iron background, making them thoroughly visible at a distance, particularly for those traveling at the leisurely pace of a horse-drawn carriage. They stand an average of 2' off the ground, mounted at an angle on small fluted posts. Their presence on the field helped to literally give names on the landscape to sites that were famous in print and legend. Most of these tablets still stand where they were placed, serving the purpose for which they were designed. Avenue markers used the same design, giving the field a consistent signage and location identification system. More detailed battle information about the various brigades and corps would come later, when the commission felt that it had sufficient information and funds to place substantial granite and bronze markers on the field. The NPS also erected additional identification signs during various periods and fashions of the Gettysburg's transformation under the development under the Park Service, but the War Department iron, and granite and bronze markers still serve as a consistent

¹⁸¹ Nicholson, *Journal*, 114.

identification system and maintain a visual link with the Gettysburg National Park Commission's vision of the park.

As a part of their attention to the local roads, in 1900 the Battlefield Commission cast twelve "handsome tablets of iron" to place on the Borough Line of all local roads, visible to travelers heading away from town. The addition of these signs was of enough local significance to receive mention in the local morning paper, and was likely also part of an interest in maintaining good public relations with the Community of Gettysburg. Placed on tall iron posts with a decorative pediment at the top, the signs announced the distances to communities in every direction and served to show how the commission viewed the Gettysburg Battlefield's link with all of these communities, as well as providing a service that the borough had not done in a systematic fashion. The furthest link announced was that of Baltimore, 52 miles away on the Baltimore Pike. The plates, as were all of the tablets, were cast at Gilbert's Foundry, in Gettysburg. None of these signs remain on the public roads today.¹⁸²

After 1913 and the rush of preparations surrounding the anniversary of the Battle of Gettysburg, avenue construction slowed. "The activity in respect to avenues has been mainly maintenance," wrote Nicholson in 1916. Hunt Avenue was completed just in time for the anniversary in June 1913 and by July 1913 the commission finished constructing all of the avenues that it would ever construct. Unable to secure the funds that they would have liked early on to complete an extensive avenue system between the main battlefield and East Cavalry Field, in 1915 the commission finally began to oversee construction of permanent roads. As in all the other sections of the battlefield, East Cavalry Field had received its avenue furniture, including fences in 1903 and artillery in 1904, and an assortment of monuments and markers beginning in the days of the GBMA. But the avenues remained dirt lanes, widened only by use. The commission constructed United States Cavalry Avenue between 1915-17, Confederate Cavalry Avenue in 1916, and Gregg Avenue in 1917. Berdan Avenue, a small cul-de-sac off West Confederate Avenue, was also completed in 1917.

¹⁸² "Direction Plates for Battlefield," *Gettysburg Star and Sentinel*, 1 August 1900.

The newer avenues marked a change in the engineering practices of the Gettysburg National Park Commission. Not only did the commission authorize the avenues to be constructed as macadam roads, all the new drainage features were made of concrete. Hunt, Wainwright, Williams, and Humphreys Avenues, had been built as Macadam roads, reflecting the desire of the commission to curb costs by constructing cheaper avenues. The macadam road had a far less substantial base than the Telford road. Cope's specifications for Section 2 of East Cavalry Avenue, drawn up in 1914, show an avenue only 12' wide. The base consisted of 3" of 2" stone, topped by 3" of 1-1/2" stone, 1/2" of clay, 1" hard screenings and 1" limestone screenings.¹⁸³ One of the reasons for cutting expenses was that appropriations for the field began to dwindle, particularly in light of growing costs of labor and materials. The decision to construct concrete culverts and bridges was not only because of economy, but because of the amount of damage done to the catch-basins, cap stones, shell stones and other avenue features by automobile drivers, particularly at night.¹⁸⁴

By the time that it was completed, the East Cavalry Battlefield had five concrete culverts, all constructed by park employees, "concrete builders." All of the culverts were arched, with the largest reinforced over the arch with steel bars and the same kind of iron railing as used on several of the main battlefield's bridges. Photographs taken upon completion of the culverts show them to be awkwardly finished with loose stone at their edges rather than detailed and closely fit masonry.¹⁸⁵ By 1920, the commission began to approve the general use of concrete for walkways around the battlefield farmsteads, for repointing masonry, and as a solution to scattered problems with roadway surfaces, particularly along the public roads. "Many of the

¹⁸³ Emmor B. Cope, "East Cavalry Avenue, Section 2," Blueprint #841, GNMP - Archives.

¹⁸⁴ John P. Nicholson, Report of the Gettysburg National Park Commission (Washington, D. C.: Government Printing Office, 1921), 10.

¹⁸⁵ John P. Nicholson, Report of the Gettysburg National Park Commission (Washington, D. C.: Government Printing Office, 1915), 7; photographs #24, #26, and #43 accompanied the report typescript, but not the published version.

gutters were laid in concrete," reported the Assistant Superintendent, James Auman, in a report to the Commission, "thereby making them more permanent and better."

Well-designed and carefully executed detail was not always sacrificed to economy. The maintenance to the field required constant attention from general wear, carelessness, and vandalism. In 1920, however, Cope designed a finishing touch to the park, a gateway to Hancock Avenue near the entrance to the Soldiers' National Cemetery. The gateway, wrote Cope in his 1925 "Report on Gettysburg" to the Secretary of War, was built of Gettysburg granite and constructed by the employees of the commission. Following an introductory photograph of the relief map of the Gettysburg National Military Park, Cope chose to open his report with a photograph of the gateway, showing that to him its placement culminated what he could create for Gettysburg. The commission's work, while never "finished" in the endless details of maintenance, was for them, complete. Like most of the other granite structures in the park, the gateway was massive; two squared pillars topped with bronze eagles were flanked by low, curved granite walls. The National Park Service removed the entrance gate in the early 1960s when it reconfigured the entire area for the Cyclorama and visitor parking.

In 1918 Nicholson once again surmised the changes facing Gettysburg and its avenues, the activities of the field largely determined by the means of transportation visitors chose to see the field. "The mode of travel to Gettysburg and over the battlefield, as well as elsewhere over the country, has been entirely changed within 15 years," he wrote. "Before the advent of the automobile visitors were taken through the Park in carriages. As many as 100 teams were always on call; it would be difficult to have half a dozen livery teams now; the automobile has so completely taken up this work that it has materially checked the running of excursions. We see the automobile here by the hundreds, sometimes thousands, and from distant cities and states."¹⁸⁶

It is difficult to determine if Nicholson looked favorably upon the changes or not. Visitation to the field continued to increase as automobile touring became more popular. Many people

¹⁸⁶ Nicholson, Report of the Gettysburg National Park Commission, 1918, 8.

ventured to the battlefield along the Lincoln Highway, which had opened in 1913 as part of the first transcontinental highway. Even without outside visitation, Camp Colt, established as part of homefront training for World War I, made Gettysburg and the other military parks centers of activity. Camp Colt covered the fields between Seminary and Cemetery Ridges, a tent city complete with permanent structures, roads, gas lines, and running water. Once the armistice was signed in November the commission fought to have the damage done to the field and avenues repaired, a process that took nearly three years of irate letter writing. As late as June 1920 a large area of the field remained "covered with the debris of the camp; several miles of Tarvia-covered roads and deep drains running in all directions mar the different areas of the battlefield." Many of the road materials were later transferred for use on the avenues, but the camp roads were offensive to the commission because they were not part of the planned avenue system and left the refuse of one war tarnish the memory of another.

One of the major changes to how individuals viewed the battlefield after 1913 came with the regulation of the battlefield guides. Ever since the battle, guides had offered their services to visitors to Gettysburg, usually approaching tourists as they disembarked from the trains or as they entered the town along the public roads. Good guides offered an unparalleled view of the battlefield and complemented the commission's meticulous marking of the battlefield as the primary means of interpreting the field. By 1913 enough complaints had been registered that the commission needed to consider alternatives to allowing the guides free-reign. "The older and experienced guides are passing away," said Nicholson. Besides the few that were known to shorten the tour and "deprive the visitors of a greater portion of the field," many offered versions of the battle "at variance with its history."¹⁸⁷ To satisfy the demands of the public and the request of the War Department, the commission offered an exam about the battle and battlefield that guides had to pass in order to receive a license, a system that continues today. Ninety-five people took

¹⁸⁷ John P. Nicholson, Report of the Gettysburg National Park Commission (Washington, D. C.: Government Printing Office, 1913), 11.

the exam, with four failing and those with low scores being offered classes to improve their knowledge.¹⁸⁸

The park did not become the masterpiece that the Gettysburg National Park Commission anticipated, but the dream of many veterans was well on its way to fulfillment before the last of the key veterans died. The generation that shared their need, dream, and vision also passed on before the plan was complete. Development of the battlefield was supposed to take a few years, but in the end took nearly three and a half decades. Nicholson died in 1922, the last of the commissioners appointed by the War Department. Nicholson had seemed to provide the drive needed to complete the Gettysburg's commemorative landscape, but Cope, whose efforts were far less touted during his years working for the commission, provided the patience and endurance required to see each detail of the park's development through to completion. "I am running the whole business of the National Park now," he wrote his sister. "I was a little doubtful if I could do it, at first, but all insisted that I should do it, and I find that I can do it better than I expected."¹⁸⁹

In his report to the War Department on the accomplishments of the commission at Gettysburg, Cope closed his summary with a record of the expenditures for developments and maintenance of the park, something that he had kept an exact tally on for his entire tenure at Gettysburg, along with every cent spent on every foot of avenue constructed. The money had come from so many sources throughout Gettysburg's history that Cope seemed to say that the importance of the park was evident in the money lavished upon it.

¹⁸⁸ John P. Nicholson, *Report of the Gettysburg National Park Commission* (Washington, D. C.: Government Printing Office, 1916), 7.

¹⁸⁹ Cope to "Debbie," Gettysburg, 23 July 1922, "Participant Accounts - Cope, Emmor Bradley," File #5, GNMP - Library. GNMP files contain little information about E. B. Cope's final years at the park, from 1922 until his death in 1927. He apparently did not maintain the same type of system that Nicholson had enforced to keep copies of all correspondence, coming and going. The War Department records stored at the National Archives in Washington, D.C., likely could fill in details about the treatment of the avenues during this period.

GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
HAER No. PA-485
(Page 131)

From the beginning of the GBMA to the end of the fiscal year 1925, expenditures stood at:

Gettysburg National Park Commission.....	\$1,901,722.50
Gettysburg Battlefield Memorial Association..	\$680,228.33
By States for State monuments.....	\$300,000.00
By Survivors Associations.....	\$175,000.00
By States for equestrian statues.....	\$175,000.00
By States for others statues.....	\$150,000.00
<u>Total</u>	\$3,381,950.83

Cope died in 1927, the last of the veterans with close associations with the park. James Aumen acted as superintendent until a successor could be named to take his place. Colonel E. E. Davis assumed control of the park on 17 June 1927. Changes to the avenue system began immediately, evident in the tone of the 1927 Annual Report to the Quartermaster General. Aumen wrote the 1926-27 report and expressed in unguarded terms that the park, particularly its avenue system, was old-fashioned. The avenues required time and money to keep them serviceable. "They were built before the motor-propelled vehicles had come into use and up to that time were considered models of the best type of road building," he wrote. Horse-drawn vehicles suited the avenues, but automobiles and trucks made maintenance of the avenues an impossibility, so that without resurfacing the solid Telford base, it was "only a question of time [before] they will be beyond repair."¹⁹⁰

By 25 April 1928 Davis had contracted with Edward J. Farrell, of Gettysburg, to resurface 6 miles of avenues, including Hancock, the Loop, East Confederate, Sykes, Warren, Sickles, Buford, and North Confederate, for \$15,400.00. Soon Sedgwick, Slocum, West Confederate, Howard, Meade, Reynolds, Pleasonton, and Humphreys Avenues were also resurfaced. During the commission's tenure, nearly all contracts for work done on the avenues were issued to M. & T. E. Farrell, of West Chester. Under the new superintendency contracts began to be issued to new names, such as the Good Roads Company, Inc. of Upper Darby to resurface most of the first day's avenues and Ellsworth C. Valentine, of Frederick, Maryland, who received the contract to resurface 6 1/2 miles of avenues for \$17,004.13.

¹⁹⁰ James B. Aumen, Report of the Gettysburg National Military Park, 1 July 1927, GNMP - Archives.

A blight destroying the chestnut trees in the area forced the park to reconsider its fencing materials. At first the park replaced old farm fencing, as needed, with woven wire. Desiring a consistent fencing material and facing few timber options, Davis oversaw the replacement of wood fence posts with concrete ones. By 1931 the superintendent had ordered 1,660 cement posts from the M. J. Grove Lime Company, of Lime Kiln, Maryland. Davis also began to consider producing the posts at the park with park labor. The purchase of a 600 gallon water tank meant for cleaning monuments promised, as well, to ease all cement construction and repair. Within the first two years, as well, the park replaced nearly 5 miles of the "unsightly stone drains" (the old stone gutters) with concrete, entirely removing the stone. The economic benefits of the change included less labor needed to make repairs and "eliminat[ing] the cost of weed killer and its application."¹⁹¹

The new administration sought efficiency and economy and busied itself repairing and replacing what it perceived were the maintenance blemishes left by the commission. In essence Davis did not change anything significant in the overall interpretation and presentation of the battlefield. Davis began to note the changing ways in which people visited the battlefield and its meaning to a new generation of visitors. In 1931 Davis estimated that visitor counts to the battlefield came to 567,970 for the fiscal year. These visitors to the field, particularly military units, had developed a "custom. . . of placing wreaths and holding services at some selected monument. Quite often these are at a monument to an organization of which the one conducting the ceremonies is a descendant."¹⁹² The generation of Civil War veterans of living memory were passing.

Conclusion:

From the days after the battle and the Gettysburg Address to the most recent unveiling of the long-planned Longstreet memorial, meaning has been placed, added, moved, and removed in the Gettysburg Battlefield in the form of monuments, markers, signs, buildings, trees, rocks, observation towers and avenues. The

¹⁹¹ E. E. Davis, Report of the Gettysburg National Military Park, 1 September 1928, GNMP - Archives.

¹⁹² E. E. Davis, Report of the Gettysburg National Military Park, 30 July 1931, GNMP - Archives.

entire commemorative landscape shows the transferal of memory from that of battle-worn and disillusioned with battle to the glorification of manhood, bravery, and courage in the face of battle. Without the avenues the meaning, the interconnections, of the Veterans' memories of Gettysburg and the Civil War as it has been passed on to us becomes distorted, and even lost. Creating the park that commemorated the three day battle and those who fought in it took decades, which reveals the complexity of the act of its creation and its role in the lives of the veterans as they sought to secure meaning from their experiences and from the memory of war.

Understanding the development of the avenue system leads to an understanding of the veterans own experience and can add clarity to the debates over how to represent the Gettysburg landscape today. To see Gettysburg as merely a field of military tactics and where a tremendous battle took place denies Gettysburg's role as the place where veterans and the general public people struggled to find meaning out of what happened, not only for the causes and repercussions of the battle itself, but of the Civil War. The avenues today lead visitors on a tour that they may not even realize that they are taking, that of many veterans' recollections of the battle. Mentally take away the NPS tour suggestions and the audio recordings and the directional signs, and of what remains, ask "why is all this here?" The monuments and markers are not just to commemorate a battle, they commemorate the memory of battle and the recovery from the experience by those who experienced it. The avenues, besides marking the lines of battle, lead from one location to another, silently. The flanking line of monuments and the enduring marble and bronze markers speak of the emotions and conflict that must have generated such a site, as well as the change of those memories and emotions over time.

APPENDIX A:

Gettysburg Commissioners and Superintendents:

Gettysburg Battlefield Memorial Association (1872-1895)

The Governors of Pennsylvania were automatically designated the President of the Gettysburg Battlefield Memorial Association. Listed are the names of the Vice-Presidents who served on the GBMA Board of Directors.

David McConaughy	1872 - 1879
R. G. McCreary	1880 - 1883
D. A. Buehler	1883 - 1887
Charles H. Buehler	1887 - 1896

Gettysburg Battlefield Commission (1893-1933)

Three men were appointed by the War Department to the Gettysburg Battlefield Commission, one representing the Confederate forces and two from the Union Army. All the men appointed, with the exception of Bachelder, had fought in the Battle of Gettysburg. After Lomax's death in 1913 there were no more appointments to the commission, so the organization lasted only as long as the life-time of its members. Upon Nicholson's death in 1922, Cope, who had been the head engineer of the commission since its creation in 1893, became the Gettysburg Battlefield's first superintendent. With his death in 1927, all Civil War veterans' ties with the administration and design of Gettysburg ended.

John Badger Bachelder	25 May 1893 - 22 December 1894
William Henry Forney	25 May 1893 - 16 January 1894
John Page Nicholson	25 May 1893 - 8 March 1922
William McKendree Robbins	14 March 1894 - 3 May 1905
Charles A. Richardson	25 April 1895 - 24 January 1917
Lindsay Lunsford Lomax	16 May 1905 - 28 May 1913
Emmor Bradley Cope	8 March 1922 - 30 May 1927
James B. Aumen (acting)	27 May 1927 - 27 June 1927
Edgar E. Davis	27 June 1927 - 24 August 1932
J. Frank Barber	24 August 1932 - 7 February 1933

Gettysburg National Military Park (1933-1998)

James R. McConaghie	7 February 1933 - 1 February 1941
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GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
HAER No. PA-485
(Page 135)

J. Walter Coleman
James B. Meyers
Kittridge A. Wing
George F. Emery
Jerry L. Scober

1 February 1941 - 1 July 1958
1 July 1958 - 2 March 1963
2 March 1963 - 16 January 1966
16 January 1966 - 28 November 1970
13 December 1970 - August 1974

GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
HAER No. PA-485
(Page 136)

APPENDIX B:

Avenue Details:

Names of Avenues According to Park Area:

**South and Southwest of
Gettysburg, South of
Fairfield Road and West of
the Baltimore Pike:**

Ayres Avenue
Berdan Avenue
Birney Avenue
Brooke Avenue
Chamberlain Avenue
Cross Avenue
DeTrobriand Avenue
Hancock Avenue
Harrow Avenue
Howe Avenue
Humphreys Avenue
Hunt Avenue
Kilpatrick Avenue
Meade Avenue
Pleasanton Avenue
Sedgwick Avenue
Sickles Avenue
South Cavalry Field
South Confederate Avenue
Sykes Avenue
United States Avenue
Warren Avenue
Webb Avenue
West Confederate Avenue
Wheatfield Road
Wright Avenue

**North and Northwest of
Gettysburg:**

Buford Avenue
Coster Avenue
Doubleday Avenue
Howard Avenue
Jones Battalion Avenue
Meredith Avenue
North Confederate Avenue
Reynolds Avenue
Seminary Avenue
Stone Avenue
Wadsworth Avenue

East Cavalry Field:

Confederate Cavalry Avenue
Custer Avenue
Gregg Avenue
United States Avenue

Culp's Hill Area:

Benner Hill Avenue
Carman Avenue
Colgrove Avenue
East Confederate Avenue
Geary Avenue
Neill Avenue
Slocum Avenue
Wainwright Avenue
Williams Avenue

Avenues No Longer Existing:

Chamberlain Avenue
Harrow Avenue
Meade Avenue
Reynolds Branch Avenue
Webb Avenue

AVENUE DETAILS:

Most of the avenues in the Gettysburg National Military Park bear the names of Union Civil War commanding officers who participated in the Battle of Gettysburg. The Gettysburg Battlefield Memorial Association (GBMA) established the names of the more prominent of the avenues in the 1880s, and the others evolved with the construction of new avenues under the Gettysburg National Military Park Commission. The naming of the Confederate avenues never extended beyond directional designations, as in North, South, East and West Confederate Avenues, although there is evidence in the battlefield commissioners' records that they intended to name these avenues as well.

Few maps are available to the public today which show many of the avenue names, even those which are still commonly known and labeled on the battlefield avenues. Recent Gettysburg National Military Park pamphlets and guides highlight those roads and avenues which are part of the self-guided Auto Tour, which, while preventing an overwhelming amount of information for the visitor to decipher, disguises the rich complexity of the avenue landscape.

The purpose of this section is to give each avenue equal attention, by systematically offering the same type of information about each one. The smaller avenues in the outlying areas of the Gettysburg National Military Park can be easily overlooked, but in their origins and intent they were given the same consideration as their grander counterparts. The avenues were constructed in a piecemeal fashion, as funds and property became available, which means that some of the avenues were not constructed until decades after they were conceived.

For each avenue is included its name, material (historic base and current surface material), length, width, and location in the battlefield. Also included is a brief history of each avenue's development, from the dates of construction, some of the historical associations which led to the avenue's construction, and a general outline of alignment and other alterations. The same construction company, M. & T. E. Farrell, built most of the avenues, so that information has not been included here but is explored in the previous section along with some of the other individuals and companies which helped to build the park as we know it today. Other more uniform details are also explored in

the previous section. The description offers a record of how the avenue is experienced today, particularly pointing out landscape and road features which affect the tour road experience. The final section, which is on significant features, highlights the avenues' attractions, whether engineering features, vistas, particularly significant historical attractions, or even negative features of the avenue as experienced today.¹⁹³

The lengths of some of the avenues have been altered over the years. The lengths offered here include the Gettysburg Park Commission's construction measurements in feet, and the recent National Park Service (NPS) Classified Structures Reports measurements determined to one-hundredths of a mile. In cases where the NPS survey combined several avenues into one measurement, a third figure, calculated with a car odometer, breaks down that number to the distance of the individual avenue.

The Gettysburg Park Commission determined the width of the avenue to include the entire road base, which went from edge to edge of the road surface; the commission did not include gutters, shoulders or ditches in its figures. NPS projects to record park structures seemed to record widths which often differed significantly from the previous and current measurements. Some of these measurements may have included shoulder widths in their total, although it is unclear from the study what was meant to be

¹⁹³ The information for the avenue details comes from a variety of sources. Some of the factual, materials, and measurement information has been derived from the following sources: *The Location of the Monuments, Markers, and Tablets on the Battlefield of Gettysburg* (Washington, D.C.: Government Printing Office, 1932); *List of Classified Structures, Gettysburg Military Park*, Volumes 21 and 23 (Denver Service Center, 1994), GNMP - Office of the Historical Architect; *Annual Reports of the Battlefield Commission, 1893-1921*; *Superintendents Monthly Narrative Reports, 1933-1943*; Emmor B. Cope, *Avenue Log, 1893-1924*, GNMP - Archives; "Roads and Avenues," Vertical File #732, Folder 1, GNMP - Archives; *Gettysburg Battlefield Memorial Association Minute Book, 1872-1895*, GNMP-Archives; William H. Allison and Dr. Louis E. King, "Avenues and Their Historical Significance, Gettysburg National Military Park, Gettysburg, Pennsylvania," 1934, Vertical File #732, folder 2, GNMP - Archives.

included in the measurement. The most recent measurement was determined by measuring from paved edge to paved edge, also non-inclusive of gutters, shoulders, or ditches, in an effort to remain consistent with the early construction figures. The measurements were taken at three to six locations for each avenue.

() = War Department era construction

[] = Classified Structures Reports

final = measurements taken in summer 1998 by project historian

1. Ayres Avenue

Material: Telford base with asphalt surface.

Length: (Ayres, DeTrobriand, Brooke and Cross when constructed together and totaled 5850') [0.303 mile, Ayres only]

Width: (16') [16'] Most recent paving, 12'-13.5', although the layer below sticks out as much as 1' on each side.

Location: Ayres Avenue lies west of Little Round Top, borders the east edge of The Wheatfield, and runs through the eastern section of Rose Woods. The one way avenue meanders on its north-south route from Wheatfield Road to Sickles Avenue. It connects with Wheatfield Road at its northern end and becomes Cross Avenue where it intersects with Sickles Avenue at its southern end.

Brief History: Ayres Avenue was constructed in conjunction with Brooke Avenue in 1906-07 and included all of what are known separately today as Cross, Brooke and DeTrobriand Avenues, its full length 5850'. Ayres and Brooke were plotted out to give access to sixteen large regimental monuments, and were soon followed by a succession of regular infantry, and other regimental and brigade positions of both armies.

Description: While it is not intended to interfere with the interpretation of the avenue, the large brown wood gate with the "Road Closed" sign attached dominates the avenue's entrance off Wheatfield Road. Unlike other locations where trees diminish the impact of the gates, this gate appears in the middle of an open field . . . which happens to be The Wheatfield. The signs "Road Closed, 10:00pm to 6:00 am," and "One-Way, Park Only on the

Right" dwarf the small iron avenue sign. Ironically, the small sign denotes the name of the avenue whereas the others announce the universal trademarks of a park road. The narrow avenue gets an unusual amount of traffic for one that does not have many well-known historical associations, largely because it is on the Auto Tour route for circulatory purposes. If it was not on the Auto Tour route, largely for circulatory purposes, it likely would not get much travel.

The avenue combines open field views with the sheltered feel of a rural road in the woods. To the west opens a view of The Wheatfield across a few yards of mowed grass and scattered brigade markers. To the east a stone and rider fence marks a historic property boundary and a wide view of Little Round Top. The first half of the avenue runs in a straight line through the predominantly open field, but the latter half curves in a smooth, tight loop on a rise of land above the Valley of Death, just inside a line of trees which are framed by fencing. There is a greater proliferation of Union markers and tablets in this section of avenue than in any other part of the field, giving visitors a sense of troops lurking in the shadows of the few protective trees.

Significant Features: Ayres Avenue is important for its views of Little Round Top and access to The Wheatfield.

2. Benner Hill Avenue

Material: Macadam base with bituminous macadam surface.

Length: [0.252 mile]

Width: (dirt 2-track) [12'] 12'

Location: Benner Hill Avenue lies east of the Borough of Gettysburg, running north-south, perpendicular to and crossing Hanover Road, with its southern end pointing directly towards the Culp's Hill area.

Brief History: The Gettysburg Park Commission acquired the lands along Benner Hill as part of its efforts to mark the Confederate lines of battle. Benner Hill served as the starting point for the attack on Culp's Hill. The commission marked the line with tablets, artillery and boundary fencing, but did not improve access beyond a dirt and gravel path that had been used by visitors ever since the battle. The Civilian Conservation Corps

(CCC) under the NPS constructed a macadam road in 1936 to open the site, but only on the south and longer portion of the avenue.

Description: Benner Hill is removed from the rest of the park, making it one of the less visited avenues, yet it commands one of the best views Gettysburg, the valley, and the mountains to the west. Because the avenue is isolated from other park property and one comes upon it after passing numerous residences, the familiar NPS brown sign comes unexpectedly at the top of the hill. The avenue is easy to miss. Approaching from Gettysburg, one turns right into the narrow entrance and past two thin steel posts which serve as the means to close the avenue during night hours, although no chain was visible throughout the 1998 summer season. The avenue is two-way, with a loop at the south end for turning around without damaging the grass, which comes right up to the edge of the pavement. The high ground prevents erosion problems and the few culverts constructed by the CCC are slowly submerging in the decades of grass clippings.

The tactical importance of the site becomes immediately apparent, with the town visible to the west and Culp's Hill directly south along the line of the avenue. Ten pieces of artillery and brigade markers extend across the Confederate line on both sides of Hanover Road, but where pairs of guns used to flank the artillery tablets, now several only have one. The Culp's Hill tower, constructed by the War Department in 1896, is clearly visible, although today it is overshadowed by the ever-present National Tower, dominating the scene to the southwest. A post-and-rail fence defines the NPS boundary line on the east side of the avenue, while on the west only the difference between mowed grass and the different vegetation of the tended field reveals the old avenue property line. The post-and-rail fence is overgrown with shrubs and much of the fence is in serious disrepair, many sections missing altogether. A slight spur in the property line juts east from the south end of the avenue, open for exploration on foot, but this too is nearly hidden from view due to the heavy vegetation.

Significant Features: Scene of Latimer's Battalion. The avenue commands a wide view of Gettysburg and the Culp's Hill area. It retains all the characteristics of its CCC construction, including width, pavement surface, some fencing, and drainage details.

3. Berdan Avenue

Material: Macadam base with asphalt surface

Length: (626') [0.114 mile]

Width: (12') [15'] 10'

Location: Extends westerly from West Confederate Avenue to the Sharpshooters monuments in the Pitzer Woods.

Brief History: The avenue was developed from an informal path to the monuments, in place since 1889, to a more permanent surface in 1917. As a late addition to the War Department's avenue system, Berdan was surfaced with the cheaper macadam base and concrete culverts. Until improved, the avenue was known as Sharpshooters Avenue.

Description: Drivers can only approach Berdan Avenue from the north after driving the full one-way length of West Confederate Avenue from the Hagerstown Road. After crossing an open area of fields on West Confederate Avenue, the small entrance to Berdan Avenue is subtle, tucked into a section of Pitzer Woods to the west. The avenue still retains its War Department iron sign. More than just the name of the avenue, the sign shows a hand pointing towards the avenue with details of what one will find along the route. A canopy of trees shades the entire avenue, from the straight entrance and the curve to just before the loop which leads to the monuments. The pavement edge is level with the road grade.

The close juxtaposition of Berdan Avenue with West Confederate Avenue is startling and reminds visitors of the constant blending of lines and troop movements, which defies the usual exactness and separation of the Union and Confederate troop lines in the park. The avenue represents Berdan's Sharpshooters, Union troops who were sent forth to protect the second-day advance of General Daniel Sickles' Third Corps towards Emmitsburg Road. The avenue is also a reminder that the Sharpshooters were called upon to enter terrain in different ways than their comrades.

Significant Features: There are few marble monuments at Gettysburg due to the Gettysburg Memorial Association's recommendation for more durable materials. However, Company F of the U.S. Sharpshooters, from Vermont, chose to erect their monument of white marble. Its carving and lettering have lost their crispness. Berdan Avenue represents a late addition to the

War Department's Gettysburg avenue development. Its method of construction contrasts sharply with those of earlier avenues.

4. Birney Avenue

Material: Macadam base with asphalt surface

Length: (900') [0.160 mile]

Width: (18') [16'] 12'

Location: Entrance to Birney Avenue begins on the east side of Emmitsburg Road and exits on the south side of Wheatfield Road in the southwest section of the park. It borders the south and east sides of Sherfy's Peach Orchard.

Brief History: The GBMA proposed the opening of a 30' wide avenue right-of-way in October 1884 along the eastern and southern boundaries of the Peach Orchard. By 16 September 1892 land for the avenue had not yet been procured, and it was proposed yet again, only this time for a 20' wide access. In 1904 General Daniel Sickles questioned the head of the commission about why the Peach Orchard acreage had not yet been secured, particularly because it had played a dramatic role in Sickles' activities on the field. In a letter to Sickles, Nicholson explained the long standoff between the owners of the property and the GBMA and the Gettysburg Park Commission. A court decided that the GBMA would have to pay \$1,000 per acre for the land, which they refused to do, and the commission likewise refused. By 1906, however, the commission put forth yet another "Plan for an Avenue through the Peach Orchard," this one with more success.¹⁹⁴

Description: Birney Avenue and the Peach Orchard are completely exposed on their small rise of land in the middle of a wide valley. The avenue rides just below the orchard yet is significantly elevated from the surrounding fields. As soon as one ascends the avenue from the lower grade of Emmitsburg Road the Peach Orchard takes on a different appearance. The rows of peach trees seem to stand like soldiers in formation, leaning

¹⁹⁴ Letter from Major General D.E. Sickles to Col. John P. Nicholson, 16 June 1904, *Letter Book and Journal of Col. John P. Nicholson*, 1904, 82, GNMP - Archives; Nicholson, *Letter Book and Journal*, 1906, 22.

slightly towards the east away from prevailing winds, their trunks painted white to discourage gnawing predators. The monuments, tablets, and artillery scattered throughout the orchard suggest how precariously sheltered the soldiers were who held this ground. The avenue is open to two-way traffic, which does not seem to be a problem since the volume is low. Even though the avenue is two-way and has no pull-outs, there is little evidence that people pull onto the road's grass shoulder, both from the condition of the pavement edge and from the grass. Most visitors to the orchard park at the asphalt pull-out on the south side of Wheatfield Road (this section of road is also known as McGilvery Artillery Avenue), walk a narrow asphalt path, and climb a set of stairs to the orchard.

Significant Features: The boundaries of this small avenue neatly contain its famous landscape feature, the Peach Orchard.

5. Brooke Avenue

Material: Telford base with asphalt surface.

Length: (Ayres, DeTrobriand, Brooke and Cross, together totaled 5850') [DeTrobriand, Brooke and Cross, 0.787 mile] Brooke only, 0.35 mile

Width: (16') [16'] 12'-13'

Location: This avenue is now the middle section of a longer avenue which circles through a wooded area in the southwest section of the park, and can be approached off Sickles Avenue via one-way Cross Avenue. Where Cross, Brooke and DeTrobriand Avenues begin and end is determined by a now nearly overgrown land-feature. Where the Gettysburg Electric Railroad once crossed the battlefield now marks the beginning and end of the avenue. The NPS converted the old railroad bed into a hiking trail, so the landmark is still distinct. War Department Avenue signs also mark the general vicinity of the different avenue boundaries and the War Department bridges across Plum Run.

Brief History: An avenue in honor of General Brooke was proposed in May 1885 and was in existence by 1890. The GBMA opened a narrow passage from The Wheatfield through the edge of the woods in which Brooke made his charge on 2 July 1863. When replotted, expanded, and improved by the commission between 1906-07, the avenue included the entire distance of what are known separately

today as Cross, Brooke and DeTrobriand Avenues.¹⁹⁵ Ayres and Brooke, constructed at the same time, gave access to sixteen large regimental monuments, followed by a succession of regular infantry, and other regimental and brigade markers designating the advanced positions of both armies.

Description: The entire length of this avenue passes through the shade of a young-growth woodlot. It begins by passing over the heavy, headwalled Gettysburg Granite culvert, then inclines towards the Rose Farm fields. Curving sharply to the right, the avenue skirts the edge of the fields where several monuments line the right side of the road, as if in the protection of the trees as they face the fields. Brooke Avenue mimics the battle experience, taking the driver along the route of the soldiers in the trees as they peek out towards the exposed fields. Today a Virginia Worm fence and a rocky field full of grazing black cattle are visible to the west through the trees. Before the avenue makes its final curve a wayside exhibit appears on the left, directly in the path of the Rose Farm. The exhibit's heading, "Images of Death," and the accompanying photographs, in combination with the seclusion of the spot, make for one of the darkest and literal presentations in the park, a sensation aided by the layout of the avenue and its monuments.

Significant Features: Key features of the War Department period avenue survive throughout the entire loop, particularly two large Gettysburg granite culverts constructed over the run at two points. The run begins at the Rose Farm and merges with Plum Run below Devil's Den.

6. Buford Avenue

Material: Telford base with asphalt surface.

Length: (3435') [0.630 mile]

Width: (16') [20'] 16' to 18'

Location: Buford is a two-way avenue that connects Reynolds Avenue to the Mummasburg Road in the Oak Ridge area of the battlefield, northeast of the borough of Gettysburg.

¹⁹⁵ Gettysburg Park Commission Annual Report, 1907.

Brief History: A roadway existed along the route of Buford Avenue by 1890 and appeared on the GBMA "Map of the Gettysburg Battle-Field." In 1899, Emmor B. Cope labeled this as a "poor earth road" in his assessment of the progress made and work to be done by the Gettysburg Park Commission. The contracting company M. & T. E. Farrell Telfordized the avenue in 1902.¹⁹⁶

As one of the most western avenues, it honors General Buford and his men who held the ground west of Gettysburg until reinforcements could arrive from the rest of the Army of the Potomac. Buford pioneered dismounted cavalry tactics, where one man would hold the horses of four while the other three went forward to fight, thereby allowing the men better overall mobility and reduce the loss of horses.¹⁹⁷

Description: The entire length of Buford Avenue is through open fields. Stumps of long-since removed trees survive to show that the drive was not always conducted without shade. An older resident of the area said that there used to be elms along the route, creating more of a park rather than a farm landscape.¹⁹⁸ From the time one turns on to the avenue, from either of its entrances, the rolling expanse of monumented fields, the Peace Light Memorial, and farmsteads fill the landscape. If following the NPS suggested tour route, one approaches the avenue via a three-way stop with Reynolds, Wadsworth and Buford Avenues. Buford heads north-west, takes one ninety-degree turn to the north, and after passing several monuments, exits at the Mummasburg Road. There is one paved pull-out along the avenue, but many places where people have pulled over to read markers and

¹⁹⁶ Bachelder, "Map of the Gettysburg Battle-Field Showing the Public Roads and Union Avenues," MC2 DRD, Folder 66/97, GNMP - Archives; Emmor B. Cope, "Map showing Avenues, Pikes and Roads on Battlefield of Gettysburg," 1899, Blueprint #368, GNMP - Archives.

¹⁹⁷ General Edward Stackpole, *They Met at Gettysburg* (Harrisburg, PA: Eagle Books, 1956).

¹⁹⁸ From a conversation with a retired Gettysburg College professor and his wife at the intersection of Reynolds, Buford and Wadsworth Avenues, June 1998. The professor was a student at Gettysburg College in the 1940s and returned to the college for his teaching career.

snap photos of the landscape and monuments. Even though it is an agricultural landscape, no fences separate the active farmland from the avenue, with the distinction made visible instead by fields of corn and hay, in contrast to mowed grass.

Significant Features: Original War Department culverts with large capstones are still in place on the south section of the avenue, serving as one of two main drainage points for the large field, which is framed by park roads. The NPS had intended to realign the avenue and thus had not invested in altering this existing drainage system.

7. Carman Avenue

Material: Telford base with asphalt surface.

Length: (1794' w/Colgrove) [0.959 w/Colgrove] Carman only, 0.2 miles

Width: (16') [24'] 15' along most of the avenue, except at the furthest curves, where it widens to 16'.

Location: Carman Avenue connects with Colgrove Avenue in the Culp's Hill section of the park. It serves as part of the southern entrance to the Culp's Hill area, with the one-way route becoming part of the entrance thoroughfare before meeting Colgrove again a little north of where it first joined. It also serves as a loop for drivers who entered the area from East Confederate Avenue.

Brief History: The commission resorted to condemnation proceedings against the heirs of the McCallisters, of McCallister's Mill along Rock Creek, for the land to build Carman and Colgrove Avenues. Even in commissioner reports after the improvement and naming of Carman Avenue in 1905, it was not clearly distinguished from Colgrove Avenue. The two avenues opened the positions of the Twenty-Seventh Indiana, Second Massachusetts, Thirteenth New Jersey, and Third Wisconsin regiments, extending in a loop beginning several yards south of Spangler's Spring. The GBMA announced their intention of opening an avenue along part of this line all the way to the Baltimore Pike in 1882 as part of Slocum Avenue. When the CCC opened Colgrove to the Baltimore Pike in the 1930s, the loop section of the avenue became more clearly distinguished as Carman.

Description: A small kidney-bean shaped spur in the woods, Carman Avenue treats park visitors to one of the few glimpses of Rock Creek that they will get unless they leave their cars. Approached from Colgrove Avenue, either via the Baltimore Pike or East Confederate Avenues, Carman Avenue is a beautiful, undulating loop through the woods onto an overgrown rocky outcrop with a strategically elevated view of the creek. The influence of the NPS on the wooded avenue is particularly apparent in the intersection where one enters Carman from Colgrove. In addition to raising the grade, varied layers and colors of pavement keep creeping outwards where automobiles nip the curve from both sides closer and closer to the woods. The site is elevated enough that there are few added drainage features, including one culvert added by the CCC. Once past the avenue entrance, most cars manage to stay on the avenue, the only wear appearing near the end where markers and monuments draw attention.

Significant Features: The avenue offers rare access near Rock Creek for those who travel the avenues only via automobile.

8. Chamberlain Avenue

Material: Telford base, now a hiking trail.

Length: (1050')

Width: (16') 3.5' asphalt walkway along the upper section of the old avenue, with a cinder trail along the rest, now overgrown and of sporadic widths.

Location: Chamberlain Avenue followed the key position held by the Twentieth Maine Infantry Division on the south side of Little Round Top. Now as a walkway, it begins at the west end of Wright Avenue and comes out at the south end of Sedgwick Avenue.

Brief History: Completed in 1902 by the War Department, the NPS removed the avenue in the 1970s.

Description: Chamberlain Avenue may have been obliterated from park maps, but its Telford-based path is still indelible on the ground even as it passes through thick woods. Pedestrians exploring the vicinity of Little Round Top are lured along the old avenue by a narrow asphalt walk and a wayside information sign mounted in the middle of the path. Once at the end of the straight path, the more adventurous also realize that smooth ground continues in a curve down the back of the hill. Most

people who visit the site park their cars at the base of the small hill in three parking spaces provided along Wright Avenue. From this perspective, granite steps leading up the rocky rise are more visible than the path on the right leading into the woods away from the point of interest. For all the appeal of the site, it looks quite worn from heavy use and because little of the fallen trees and overgrown brush seems to get cleared.

Significant Features: An unusual iron sign from the War Department era now goes largely unnoticed. More visible for traffic headed in either direction along Sykes Avenue, a tablet announces "This wall was built for defense July 3rd P. M., 1863," about one of the stone walls which connects Chamberlain and Sykes Avenues. Since the 1990s movie *Gettysburg*, based on Michael Shaara's prize-winning novel, *The Killer Angels*, visitation to this particular spot has grown. The site went from representing just another series of brave acts by Union soldiers at Gettysburg to a place which has grown symbolically central to current park visitors.

9. Colgrove Avenue

Material: Telford base with asphalt surface.

Length: (1,794' w/Carman) [0.959 mile w/Carman] Colgrove only, 0.7 mile

Width: (16') [24'] 16'

Location: Colgrove Avenue connects with Slocum Avenue in the Culp's Hill section of the park, between Hanover and Baltimore Pike, southeast of Gettysburg. It serves as the southern entrance to the Culp's Hill area, with a one-way route beginning on the Baltimore Pike in the vicinity of Slocum's Headquarters, traveling generally from the south-west and heading north-east. The section of the avenue nearest Spangler's Spring is two-way. The avenue can also be approached via East Confederate Avenue.

Brief History: Acquiring land to build this avenue did not come easily. Rather than purchasing the land outright, as the commission preferred, the land had to be obtained from the McCallister heirs through condemnation proceedings. Colgrove Avenue was difficult to distinguish from Carman Avenue, even in the commissioners' reports after the road was improved and named in 1905. The avenue, along with Carman Avenue, opened the positions of the Twenty-seventh Indiana, Second Massachusetts,

Thirteenth New Jersey, and Third Wisconsin regiments, extending in a loop beginning several yards south of Spangler's Spring. The GBMA announced their intention of opening an avenue along part of this line all the way to the Baltimore Pike in 1882 as part of Slocum Avenue, and pursued its construction in July 1885 by acquiring a 60' right-of-way from the Second Massachusetts monument "to the Baltimore turnpike, by way of McCallister's lane." The avenue appears on maps by 1887. The CCC improved the avenue with a macadam surface from the loop to the Baltimore Pike, creating better circulation in that section of the park.¹⁹⁹

Description: Colgrove Avenue is a relatively lightly traveled avenue due to its location. The avenue used to travel through relatively open land, but for most of its length now it is shaded by a full growth of trees, with swampy land to the south and overgrown fields to the north. Reminders of the fields are visible in the stone walls which now stand between the avenue and the old fields. Large wood entrance gates, like those throughout the rest of the park put up to help enforce the 6:00 am to 10:00 pm park hours, dominate the entrance but also visibly announce that visitors have entered a National Park. Constructed as a permanent road by the CCC in the 1930s, the avenue has the characteristic raised road grade of National Park roads, as well as a long sweeping curve which smoothed out the lines of the unimproved road bed.

After passing through all woods, including the section of Carman Avenue that one-way signs direct motorists to follow, at the approach to Spangler's Spring the land opens to a field of marshy grasses between the avenue and Rock Creek and mowed grass around the spring. The entire area has been drained through a series of culverts, creating a much drier landscape than the Civil War soldiers would have known. No monuments appear until the junction with Carman Avenue and near Spangler's Spring, making this avenue more of a circulatory route today, even if the area originally had more direct connections with the battle than are commemorated in the landscape.

¹⁹⁹ L. Frederick Rice, "Gettysburg Battleground Showing Location of Monuments," for The Smith Granite Co. (Boston, MA: W.B. Amringe, 1887); Cope, "Map of the Battle-Field of Gettysburg, PA, July 1, 2 and 3, 1863." McCallister's Lane appears on Emmor B. Cope's map, which was drawn in the days after the battle.

Significant Features: The Second Massachusetts Infantry placed the first regimental marker on the Gettysburg Battlefield near Spangler Meadow in 1879. The scrubby growth across the fields from the Second Massachusetts' monument to the Baltimore Pike used to be an open swale, with clear views of Powers Hill and beyond.²⁰⁰

10. Confederate Cavalry Avenue

Material: Macadam base with a bituminous macadam surface.

Length: [0.653 mile]

Width: (12') [20'] 12'

Location: Confederate Cavalry Avenue is a part of the East Cavalry Battlefield Site, about four miles east of Gettysburg between Hanover Road and the York Pike. The two-way avenue has two access points, off Cavalry Field Road at its northern-most point or Gregg Avenue via Low Dutch Road. Approached from Gregg Avenue it runs in a north-east direction, paralleling United States Cavalry Avenue.

Brief History: The avenue follows the Confederate Cavalry battle line of some of Stuart's forces. After acquiring the land, the War Department macadamized the avenue in 1916, including adding a system of concrete culverts. When the CCC resurfaced the avenue in the 1930s for the NPS, it replaced and widened most of the concrete culverts with more natural-looking stone culverts.

Description: The route is a relatively flat, narrow road with several angular curves as it follows the field's topography and the Confederate Cavalry line, facing the Union Cavalry line in the distance. While still predominantly through open fields, the woods, which delineated the northern-most section of the avenue, has crept further south and continues to encroach the fields. Cannon line the avenue opposite the main section of woods. Clumps of cedars have begun to take over the brigade markers that they were once meant to highlight. One of the most visibly pleasing aspects of the road is the changing view of the Rummel Farm buildings and fields as the avenue shifts and turns. The

²⁰⁰ "The Swale near Spangler's Spring," William H. Tipton photograph in Henry Sweetser Burrage, *Gettysburg and Lincoln* (New York: G.P. Putnam's Sons, 1906), 148.

line of electric cattle fence is one of the few features which announces the landscape has adopted more modern farming methods. Several paved and graveled pull-outs accommodate traffic, but most visitors who plan to spend more than passing time on the avenue choose to stop at the gravel parking area provided at the junction of Cavalry Field Road and Confederate Cavalry Avenue. Cavalry Field Road, oriented east-west, has trees growing closely on its shoulder, making the transition from "park road" to "public road" all the more startling when one leaves the shelter of trees and drives onto the wider, paved public road, encountering painted lines and deep ditches filled with white rip-rap.

This avenue receives a type of traffic unlike many of the avenues in the park. Large farm tractors, often with heavily loaded wagons attached, use the East Cavalry Field avenues for access to their acreage as part of an agreement with the NPS. Unfortunately, the roads are not constructed to handle such weight, and the loaded wagons and other heavy vehicles stress the roads in ways that average automobile traffic would not, forcing a crown in the middle of the pavement as the sides are forced downwards. In other words, the lateral flow of the subgrade material has caused ruts in the surface material.

Significant Features: The avenue, along with the rest of East Cavalry Field, retains the feel of what the War Department seems to have wanted the avenue experience to be, except that some of the more formal features, such as fencing on both sides of the roadway, are gone. The continued agricultural use of the land surrounding the avenues also is one of the few places where the War Department's hoped-for vision of land remaining agricultural seems to have been fulfilled, although development along Hanover Road begins to encroach on some of the viewshed.

11. Coster Avenue

Material: Asphalt paved from Stratton Street to an alley, then grass-covered earth within the entire eastern section of the avenue.

Length: Two city blocks

Width: Paved section 30', grass section 50'

Location: The avenue runs east-west, beginning at Stratton Street in the north-east section of Gettysburg in a mostly residential neighborhood.

Brief History: The GBMA acquired the land for Coster Avenue to commemorate the retreat of the Eleventh Corps from the Barlow Knoll area north of Gettysburg on the first day of fighting.

Description: The western half of Coster Avenue was developed more for access to the residences in the area than for the avenue itself. Despite its seclusion and relative obscurity, Coster Avenue has all the features of a formal avenue, including fencing, monuments, an avenue name tablet, and a Union Brigade marker. The avenue begins at Stratton Street, looking much like any other of the borough streets, asphalt paved and with tall shade trees on either side. The paved section covers about one-third of the avenue's full length, the rest a widened expanse of green grass kept mowed by the NPS. Besides the marker and the distinct concrete and pipe fencing first used in the park between 1927 and 1933, the paved section could be mistaken for a city street, especially because it provides access to a frequently-used alley and tenant parking spaces towards the south. Concrete and pipe fencing, buildings, and overgrown hedges enclose and define three sides of the avenue.

In an effort to highlight the activities of the first day of fighting, in the late 1980s an artist painted a mural the full length of the building on the avenue's southern border. Exposure to the elements has caused its surface to fade and flake, making the little avenue seem more forlorn and overlooked. The easternmost end of the avenue suffers from poor drainage; this is especially apparent in the disintegrating concrete fencing, which has gradually dissolved away at the base of each post. The housing construction that has occurred since the time when the avenue was first plotted has likely cut whatever natural drainage upon which the avenue depended.

Significant Features: Coster Avenue is a surviving GBMA avenue. The mural, despite its current condition, is a significant recent attempt to commemorate one aspect of the Battle of Gettysburg. The white marble monument erected by the Twenty-seventh Pennsylvania Infantry is gradually weathering away, revealing the wisdom of the GBMA's suggestion that veterans limit the materials for monuments to more durable granite and bronze.

12. Crawford Avenue

Material: Telford base with an asphalt surface.

Length: (2015') [0.345 mile]

Width: (20') [18'] 18'

Location: Crawford Avenue runs one-way south from Wheatfield Road to the junction of Warren and Sickles Avenues, west of Little Round Top.

Brief History: Crawford Avenue, built in 1887, runs from Devil's Den to The Wheatfield. The current Crawford Avenue does not seem to be the avenue mentioned in the minutes of the GBMA. While Crawford Avenue does indeed run from Devil's Den to Wheatfield Road, the only section that the GBMA had improved at the time was the avenue which later became the southern section of Sickles Avenue. The GBMA did not acquire the land on which the present day Crawford Avenue exists until after May 1893, when "the hon. Edward McPherson was authorized to negotiate with the heirs of Gen. Crawford for the purchase of the tract of land known as Crawford's Park."²⁰¹ Crawford's Park had housed many tourists attractions for visitors to the battlefield and was owned by General Crawford, who had fought at the Battle of Gettysburg and took an active interest in the site. The avenue was Telfordized in 1897.

Description: Crawford Avenue takes visitors through an open valley landscape punctuated with rocks and large boulders. To the east rises Little Round Top, and to the west a gentler rise, but equally rocky landscape. Visitors cross a War Department bridge over Plum Run shortly after turning onto Crawford Avenue, and then the road parallels the run through the Valley of Death. Grass and various constructed drainage systems have channeled Plum Run so much that now it is largely hidden from view until one gets to the rocks near Devil's Den. Nineteenth century photographs reveal that the landscape was heavy with moisture, and that the run flowed freely in its route through the valley. At the end of the avenue drivers have the option to continue straight along Sickles Avenue towards Devil's Den and visitor rest room facilities, or to turn left on Warren Avenue. The entire area is not on the official park tour route, but the avenue receives heavy traffic because of the draw of Devil's Den.

²⁰¹ 4 November 1887, and 19 May 1993, GBMA Minute Book, GNMP - Archives.

Significant Features: The War Department bridge over Plum Run, with its pipe railings, remains an important part of the park's landscape as created by the Gettysburg Park Commission. The avenue offers the closest view of Little Round Top for visitors without them actually having to walk across the landmark's rocky surface.

13. Cross Avenue

Material: Telford base with asphalt surface.

Length: (Ayres, DeTrobriand, Brooke and Cross, together total 5850') [DeTrobriand, Brooke and Cross, 0.787 mile] Cross only, 0.2 mile

Width: (16') [16'] 12'-14'

Location: This avenue is now the first section of a longer one-way avenue which circles through a wooded area in the southwest section of the park. Cross Avenue begins at the intersection of Sickles and Ayres Avenues, then merges into Brooke and DeTrobriand Avenues, which exit at Sickles Avenue, near The Wheatfield.

Brief History: Cross Avenue was constructed in 1906 as a part of Brooke avenue, but did not receive its name until 1920. This avenue is the first section of a longer avenue which circles through a wooded area in the southwest section of the park. Where Cross, Brooke and DeTrobriand Avenues begin and end is determined by a now nearly overgrown land-feature. Where the Gettysburg Electric Railroad once crossed the battlefield now marks the beginning and end of the avenue. The old railroad bed is now part of a hiking trail, so the landmark is still distinct. War Department Avenue signs also mark the general vicinity of the different avenue demarcations. Each section is named for the Brigades that fought there during the second day of the battle.

Description: Cross is a narrow asphalt avenue that runs through a forested area of relatively young growth. The absence of historic markers or monuments, except at the intersection of Sickles and Ayres Avenues, makes the route feel more like a woodsy path with a better-than-average road surface. The road shoulders show little wear because few obvious attractions along the route beckon drivers to pull over.

Significant Features: The only pull-out, of gravel, is near the juncture of Cross Avenue with Brooke Avenue. The avenue functions more as a circulatory route towards more climactic points on the battlefield.

14. Custer Avenue

Material: Grass-covered earth.

Length: [215']

Width: [16']

Location: Custer Avenue is a part of the East Cavalry Battlefield Site, about four miles east of Gettysburg between Hanover Road and the York Pike. Approached from Gregg Avenue, Custer Avenue projects a short distance south off Gregg Avenue.

Brief History: The land originally purchased by the GBMA for Custer Avenue was 60' wide and 215' long. Aside from the removal of fences and the acquisition of more land, little has changed at this site from its GBMA days, except that visitors park on Gregg Avenue and walk to the Michigan Cavalry monument shaft, instead of driving their carriages up to and around it.

Description: If approaching the avenue from United States Cavalry Avenue, one anticipates Custer Avenue several minutes before reaching it. The tall shaft of the Michigan Cavalry monument announces the importance of the distant field. Once there, the monument's stature is accentuated by its approach. Up the center of the broad avenue, a 16' wide section is grass-covered and crowned, with side slopes and drain swales. It is unclear when these formal features were added to the avenue, and erosion gradually diminished them. Surrounding the avenue are active farm fields. The avenue itself is not set off with any fencing, rather it is differentiated with farm fields and mowed grass. A similar avenue extends north into the field east of Custer Avenue to the Gregg Cavalry Shaft and the Third Pennsylvania Cavalry monument. This grassy avenue, although unnamed, likewise has constructed avenue features.

Significant Features: Custer Avenue is one of the few surviving avenues which retains the character of the GBMA period. The First, Fifth, Sixth, and Seventh Michigan Cavalry shaft, the focus of the avenue, was one of Emmor B. Cope's favorites and held up as an example of fine design.

15. DeTrobriand Avenue

Material: Telford base surfaced with asphalt

Length: (Ayres, DeTrobriand, Brooke and Cross, together total 5850') [DeTrobriand, Brooke and Cross, 0.787 mile] DeTrobriand only, 0.25 mile

Width: (16') [16'] 12'-14', the widest point near the junction with Sickles.

Location: This avenue is now the furthest section of a longer avenue which circles through a wooded area in the southwest section of the park. Approached off Sickles Avenue via one-way Cross Avenue and then Brooke Avenue, the roadway finally becomes DeTrobriand Avenue shortly after passing the Rose Farm to the west. Where the Gettysburg Electric Railroad once crossed the battlefield marks the beginning of the avenue. The old railroad bed is now part of a hiking trail, so the landmark is still distinct. A War Department iron avenue signs also marks the avenue boundary. DeTrobriand junctures with Sickles at the lower end of The Wheatfield.

Brief History: DeTrobriand Avenue was constructed in 1906 as Brooke Avenue, and did not receive its current name until 1920. For a few weeks before officially becoming "DeTrobriand," the avenue the road held other names, like "Burling Avenue".²⁰²

Description: The narrow asphalt avenue concludes a longer section of a shaded tour-road loop, while its final half emerges from the woods through a parade of monuments, then ends at a "T" at the southern edge of The Wheatfield. A "Do Not Enter Sign" forces visitors to turn left on Sickles Avenue, even though a wayside exhibit stands tantalizingly close in the other direction. For the final half of the route a stone wall comes in and out of view on the south side, defining the line between woods and grassy field. Because the avenue emerges from the woods at the topographically low end of The Wheatfield, the roadway has several culverts which were altered in the 1930s to the stone arched and cement types then used by the NPS.

Significant Features: An unusual small bridge appears near the end of DeTrobriand Avenue along its stone wall. The wall was

²⁰² Nicholson, Letter Book and Journal, 1920, 55-56.

used as a breastworks by DeTrobriand's troops on the second day of fighting.²⁰³ To prevent the wall from washing away during wet periods, while at the same time wanting to keep the line of the wall continuous, a culvert bridge was constructed by placing a dressed granite slab over the drainage area, mounted on a level section of stones, then topped with loose stones like those which make up the rest of the wall. What results is an approximately 2'x 2' opening, allowing water to flow freely into the woods.

16. Doubleday

Material: Macadam and Telford base with an asphalt surface.
Length: (Telford 1450' / Extension of Doubleday, macadam 720')
[Wadsworth and Doubleday 0.546 mile] Doubleday only, 0.4 mile

Width: (16') [18'] 19' from Robinson Avenue to the woods edge, then 17.5' to the curve and Wadsworth Avenue.

Location: Doubleday Avenue runs north-south along Oak Ridge, parallel to the Western Maryland Railroad, between Mummasburg Road and the Chambersburg Pike in the northwest section of the park.

Brief History: For many years Doubleday Avenue was little more than an access point for the Oak Ridge area. The avenue from Mummasburg Road to the edge of Will's Woods, about half of the present distance, was Telfordized in 1898 by the commission to provide access to the Oak Ridge Tower and along Oak Ridge, and included a 45' long turn-out for viewing and to turn carriages. The rest of the avenue was not covered with a good road surface until 1906, when the added section of Doubleday became one of the first roads in the avenue system constructed with a macadam base. The CCC widened the Mummasburg Road entrance in the 1930s and added a rustic fence and pavement in the tower parking area, both of which have seen a variety of configurations in an effort to serve the automobile. The current guard rail is of squared wood.

Description: The relatively short Doubleday Avenue combines open vistas with shaded suburbia. The avenue can be approached from three points: Wadsworth Avenue from the south, Robinson Avenue coming up Oak Ridge's slope from the east, and directly off Mummasburg Road, where the avenue runs one way near the Oak Ridge

²⁰³ Allison and King, "Avenues and Their Historical Significance," GNMP - Archives.

tower until the intersection with Robinson Avenue. Stone walls border the route, first on the west side, then on the east, but never simultaneously. Most of the western wall has fallen and become overgrown with trees and shrubs, making it lose any sense of its agricultural purpose. The monuments here, likewise, seem dwarfed by the shrubbery.

When one first enters the avenue the remains of the Oak Ridge Tower and the view of the borough of Gettysburg and Gettysburg College to the east command attention, inspiring many cars to pull over to the asphalt-paved parking lot. Wood guard rails prevent drivers from pulling onto the grass. When the area is especially congested, drivers pull to the right side of the avenue, even though small square concrete bollards discourage parking on the right near the stone wall. The bollards seem to succeed in their purpose, except that the entire space before one reaches them has become blotched with muddy ruts. Anyone who approaches the tower from Robinson Avenue, however, finds that to visit the tower they must pull over and walk back to the site because the avenue near the tower is one-way to prevent traffic congestion. The realization that the tower is behind them, the appearance of several monuments, and a spectacular view suddenly opening in two directions, east and west, causes many drivers pull onto the sides of the avenue. In an effort to prevent further erosion, half-moons of gravel pull-outs loop in and out of the spaces around and in front of the monuments. Soon thereafter, one passes into an area reminiscent of tree-shaded suburbia. Several houses flank the southern section of Doubleday Avenue, then end as soon as one meets the curve and the beginning of Wadsworth Avenue.

Significant Features: The Oak Ridge Tower is one of three towers constructed by the War Department in 1895. Although now truncated, it allows visitors to see the connections between Oak Hill and more distant battle-field landmarks. The Ninetieth Pennsylvania Infantry monument, at the corner of Mummasburg Road and Doubleday Avenue, is one of the best representatives of monument design based on natural subjects on the battlefield.

17. East Cavalry Avenue (United States Cavalry Avenue)

Material: Macadam base with a bituminous asphalt surface.

Length: (2990') [0.561 mile]

Width: (12') [24'] 12'

Location: United States Cavalry Avenue is a part of the East Cavalry Battlefield Site, about four miles east of Gettysburg between Hanover Road (PA Route 116) and the York Pike (Route 30). The two-way avenue has two access points, off Hanover Road or Low Dutch Road. Approached from Hanover Road it runs from the southwest to the north-east.

Brief History: The GBMA acquired the avenue right-of-way for most of United States Cavalry Avenue in the 1880s, but it remained largely unimproved until 1915-17, when the commission had the avenue macadamized and added concrete culverts and bridges, unlike most of the other bridges and culverts in the park. The commission had hoped to connect East Cavalry Field to the rest of the avenue system, but the costs of acquiring land proved formidable. Not easily daunted, the commissioners campaigned for over two decades to connect the system. The avenue today retains much of its appearance from the 1930s, when the CCC paved it.

Description: The avenues in East Cavalry Field retain much of their rural character, as the narrow roads are still quite literally used as farm lanes for local agricultural activities. Between the borough of Gettysburg and the avenue entrance are several cavalry monuments along Hanover Road. These monuments now grace the front yards of ranch houses, and are the only clues that the area was part of the larger battlefield landscape. Approaching United States Cavalry Avenue, the landscape becomes more open and green just as the trademark brown National Park sign invites drivers off the Hanover Road, onto the narrow avenue which follows the gentle rise of land. Like the other avenues in East Cavalry Field, this avenue seems like a farm lane, except that the landscape is dotted with markers and guns, as well as the tall monuments on Gregg Avenue which mark the northern horizon. At the time of this research, harvested fields on both sides of the avenue entrance left little to distinguish the fields from the trimmed avenue edges. A brigade marker on the right near the entrance is apparently well-read, judging from the worn patch where cars have created their own muddy pull-out off the pavement. The avenue has two right curves, one shortly after leaving Hanover Road, and the other before coming to Low Dutch Road. In the long straight stretch of the avenue between curves, a line of cavalry artillery faces the parallel Confederate artillery line, unseen in the distance. Several cedar trees on the left side of the avenue contrast with the scrubby barrier of

growth on the right, which separate the artillery and markers from the farmstead and fields behind.

Significant Features: One of the avenue's more interesting engineering features is the CCC extension of the northernmost culvert. Like many of the War Department culverts, the culvert was extended 8' on each side as an allowance for modern automobile traffic. The CCC attached a metal pipe extension to the concrete pipe used by the War Department. The headwall is of a type not found in other sections of the park. Four 36" x 18" coursed granite slabs, rather than the usual two, form the top of the flat headwall, the stones perhaps saved and reused during the extension process. The opposite headwall, while also extended and of a flat construction, does not show the same workmanship and nestles lower into the ground, as if constructed without the fine granite of its mate. It is difficult to tell if the Gettysburg granite used in construction came from the alteration of this culvert or from the demolition of War Department structures in other parts of the park, especially since most of the other culverts in East Cavalry Field were originally made of concrete.²⁰⁴

18. East Confederate Avenue

Material: Telford base with asphalt surface.

Length: (7241') [1.308 miles]

Width: (20') [24'] now 19' from the entrance on East Middle Street to the first curve, then 18' wide to the Spangler Spring loop.

Location: East Confederate Avenue begins within the borough of Gettysburg at Middle Street and runs southeast along positions of the Confederate Army to Slocum Avenue before ending at a modified traffic circle which used to be a carriage turn-around. It is in the Culp's Hill section of the park.

Brief History: After acquiring all the necessary strips of land, the Gettysburg Park Commission plotted and Telfordized East

²⁰⁴ Tipton Photograph, #3295, GNMP - Archives. The caption for the photograph identifies the culvert as the "view northwest at culvert on United States Cavalry Avenue...with Lott Woods in distance on horizon."

Confederate Avenue in 1900 as part of its ongoing efforts to mark the lines of the Confederate forces from the Battle of Gettysburg. As part of the construction, stone gutters were included that ran the full length of the avenue. Major storms continued to wash out nearly all of the gutters, forcing the commission to reconsider how the stones were secured in place. Here, as in other sections of the park, cement became the solution. Continuing the use of paving stones, a section of cement was added every 20' to prevent washout. The CCC removed most of the gutters in the 1930s during the extension of two of the large culverts and several of the smaller ones. At the curve at the northern base of Culp's Hill, the culvert was not removed because the NPS had planned a major realignment of the avenue which was to have removed the culvert and its surrounding gutters. On the west side of the road, however, stone gutters are still in place, although now much overgrown with grass. This section of gutter was not removed because it had not been constructed directly at the side of the avenue and was still functional.

Description: East Confederate Avenue combines several types of driving experiences, including open pastures, rock-strewn slopes, tree-covered river flood plain, and a grassy swale. It begins very unobtrusively in a residential corner of the borough where a War Department iron tablet, practically in a residential yard, identifies the avenue. One block south an open expanse of green announces the park landscape, made all the more official by the massive brown gates for closing off the avenue at night. On closer inspection, however, the expanses of green on either side of the avenue are very different. On one side is a worm-fence enclosed cow pasture with a brick farmhouse and outbuildings in the horizon, and on the other side is a closely clipped grass slope leading to an extensive collection of school buildings, most single-story and surrounded by acres of pavement.²⁰⁵

²⁰⁵ Also immediately apparent, as of mid-September 1998, is a hole in the ground that looks like a rock quarry. On closer inspection, it appeared to be a gaping, new rock-lined culvert ditch. What had once been a sturdy, substantial War Department culvert and then transformed by the CC to a pleasant, arched stone culvert, is now something so large and jarring that it could make any tourist accidentally jerk of the wheel of their car and go headlong into the hole. Apparently, the run-off from the parking lots, tennis courts, and roof surface area has

As soon as one passes the school, however, a series of fence types and landscapes parallel the worm fence, guiding the avenue through gentle curves and up and down an undulating landscape. After a nearly ninety degree turn past a line of stone breastworks, which can easily be mistaken for a regular stone wall, the avenue enters a path through the woods, guiding visitors around the base of Culp's Hill to the open ground near Spangler's Spring. If one looks closely throughout most of drive through the woods, the concrete and gas-pipe fence bordering Rock Creek becomes visible, defining the close proximity of the creek that is interpreted very little by the park today. The woodsy route also has extensive, deep asphalt gutters constructed next to the pavement, reminiscent of the War Department gutters. The road ends with a final curve into the meadow near Spangler's Spring, merging into Colgrove and Slocum Avenues.

East Confederate Avenue is not on the official park tour, perhaps saving it the wear and tear that other avenues get in the busiest seasons. The local population of Gettysburg seems to especially appreciate this avenue and the entire Culp's Hill area, and a large number use it as a regular hiking and running loop, making it feel more like a recreation area for a wide variety of people than other sections of the park.

Significant Features: East Confederate contains some of the best-preserved War Department era features in the park, including a massive Gettysburg granite culvert, a section of stone gutter near the culvert, and the unpredictable, curvy road alignment. Emmor B. Cope was particularly proud of the line of Brigade markers outlining the activities of a large Confederate force. He listed them in his sketches and later on the landscape with Brigade markers, including Hay's, Gordon's, Hoke's, Jones's, Nicholl's, O'Neal's, Daniel's, Stewart's, Walker's, and Smith's. These positions had been marked first with iron tablets and were later replaced with the round granite-based bronze markers.

19. Geary Avenue

Material: Telford base with an asphalt surface.

increased so much in recent years that the old culvert threatened to wash away. In the name of saving the avenue, the Gettysburg National Military Park approved the utterly unsympathetic plan that was recently completed. Hopefully some ground cover or trees will help deflect the unsightly mess soon.

Length: (2036') [0.377 mile]

Width: (16') [16'-20'] 16'

Location: Geary Avenue extends one-way from Spangler's Spring through Pardee Field in the Culp's Hill section of the park, beginning and ending off Slocum Avenue.

Brief History: A makeshift avenue followed the general lines of Geary Avenue, and was transferred to the War Department in 1895. This avenue also appeared in John Bachelder's 1890 "Map of the Gettysburg Battle-Field." At the time that the War Department Telford piked the avenue in 1899, Geary Avenue was also called the "South Spur of Culp's Hill," revealing its larger context and purpose in representing the area's fighting. The NPS paved the avenue with asphalt in the 1930s and widened the shoulder. Geary Avenue has not only been an important feature of the battlefield interpretation, but also it has been one of the few locations to offer an evolution of rest room facilities to the public, from wood frame outhouses to the stone structures with running water constructed by the CCC. A traditional picnic site even before the Battle of Gettysburg, the War Department viewed this area as an attraction that drew people to linger, making it a logical site to construct one of the permanent concrete guard stations around 1919 as a point of information and battlefield protection as well. The NPS removed the guard structures in the 1940s.

Description: A drive along Geary Avenue completes a semi-circle from the open land around Spangler's Spring to a heavily monumented, lightly forested valley at the intersection with Slocum Avenue. Like many of the roads throughout the park, the avenue takes visitors through a forested landscape and into open fields, characteristic of the agricultural land on which the battle was fought. Through the woods the avenue has been constructed with deep gutters directly attached to the pavement. Once into the open Pardee Field, the gutters are replaced with a slightly elevated roadbed and a series of culverts to direct rainwater. The War Department photos from 1899 show that the commission had the avenue elevated to prevent erosion in what could be boggy land, but that the NPS extended the culverts.

Little traffic follows this avenue because the secondary Auto Tour directs vehicles up Slocum Avenue and its more profusely monumented landscape instead. Although there is parking available in front of the stone 1930s rest room, most visitors

park their vehicles in the space provided near Spangler's Spring and walk the short distance to the facilities. This is just as well because an old retaining wall, which supports the road bed above the lower ground where the restroom stands, could not withstand many vehicles parking too close to the edge. The wall was put in by the War Department and then altered by the CCC to have a more rustic appearance. Unfortunately the more tangible features, such as railings, of each period are now gone. A few of the support posts from a rustic wood guard rail are still visible at ground level, where they were cut off. At the west end of the wall significant erosion and wear from tires continually keeps the earth chopped up, but this seems to be more from maintenance trucks coming to tend the facilities than careless visitors.

Significant Features: At the more northern intersection of Geary and Slocum Avenue the woods are tended to resemble woodlots. The name "Pardee Field" is carved into a large boulder in the field, rather than a separate sign announcing the site. A local landowner with a significant amount of land put up a tall, shiny cyclone fence during the summer of 1998 which gleams in the woods and is disruptive to the appearance of the park. Williams Avenue's appearance is even more affected by the same fence.

20. Gregg Avenue

Material: Macadam base resurfaced with bituminous macadam.

Length: (8,506') [Gregg only, 0.811 mile]

Width: (12') [20'] 12'

Location: Gregg Avenue is a part of the East Cavalry Battlefield Site, about four miles east of Gettysburg between Hanover Road and the York Pike. The two-way avenue has two access points, from the west off Cavalry Field Road via Confederate Cavalry Avenue and from Low Dutch Road in the east. It runs generally east and west, and serves as the connector between Confederate Cavalry and United States Cavalry Avenues.

Brief History: The GBMA first proposed "plotting and laying out of a proper avenue" along General D. M. Gregg's cavalry line in September 1888. Its growth was gradual. In May 1889 the GBMA suggested that the road extend further, to the position of the Michigan Cavalry Monument. By the time that the GBMA turned the land over to the Gettysburg Park Commission in 1896, the avenue

extended as far as the First New Jersey Cavalry Monument. While the commission continued to improve the avenue by adding the Confederate Cavalry lines, and adorning the landscape with markers, improved fencing and artillery, it did not make a more durable road surface until 1917. The commission's plans had never neglected the avenue nor East Cavalry Field. It fought for decades to have the field connected to the main battlefield through United States owned avenues, and to even have its own observation tower so that students of the battle could understand the field's activities better. Funding, the cost of land, and a general lack of public and government interest in the field curtailed those plans.

Description: The narrow Gregg Avenue retains all the characteristics of a rural road, including cultivated fields and patches of woods nearby and in the distance. The alignment of the avenue follows the old woodlots and fields which were in active use in the late nineteenth century, giving the avenue its few, yet unpredictable turns. Whereas the land under the commission had extensive fencing, both around the various farmers' fields and then post-and-rail along the avenue boundary, little fencing remains today, except for some barely visible electric cattle fencing near the west end of the avenue.

At the end of United States Cavalry Avenue a sign directs drivers onto Low Dutch Road, and from there to continue the route onto the first left. As one looks ahead up the slight slope of the road, monuments seem to grow from the farmers' fields. The avenue is slightly more elevated than the other avenues in East Cavalry Field, but here too, the grass is mowed from the road edges ten to twenty feet to the fields. Besides the rutted wear of the road surface from tractors and years of use, other sections which show the strain of traffic are the pavement edges and places where traffic pulls off the avenue for wayside exhibits and to walk to the monuments slightly off the avenue. The avenue has two official pull-outs, one gravel and one paved with asphalt. Several lanes lead off the avenue into active farm fields, showing the use it gets from agricultural vehicles.

Significant Features: Gregg Avenue reflects an earlier vision of park avenue appearance. Photographs show that this avenue has maintained a consistent picturesque scenery from the late nineteenth century to today. Two cement bridges cross small runs, one which looks more like a culvert and the other retaining guard rails. Varied patches over the culverts reveal repeated

problems with the drainage systems on the avenue, particularly the collapse of the sub-base and road surface around the drainage pipes. A flag-pole erected during the commission's tenure still stands at the west end of the avenue, although it is now nearly dominated by cedar trees.

21. Hancock Avenue

Material: Telford base with an asphalt surface.

Length: (6355') [1.237 miles]

Width: {GBMA 22' including ditches, 16' where macadamized} (25') [36'] 25'-27' entrance area 22'

Location: Hancock Avenue extends from United States Avenue at its southernmost point to a "Y" junction leading towards Emmitsburg Road to the west and the Cyclorama Center parking lot and Taneytown Road to the east.

Brief History: The name Hancock Avenue once designated the entire avenue that extended from Taneytown Road to Little Round Top. The first mention of opening this roadway came in 1881 in the minutes of the GBMA. Hancock Avenue received its name on 4 November 1887 for the entire originally planned length, but six months later the named section was shortened to the distance from Taneytown Road to Weikert's Lane (the eastern end of United States Avenue). The commission had the avenue Telfordized during 1895-96. At the time that Hancock Avenue was constructed, two loops, later known as Harrow and Webb Avenues, were also considered part of Hancock, for an additional 1470' of 20' avenue surface.

The NPS significantly altered the appearance of Hancock Avenue with the construction of the Visitor Center and parking lots in the late 1950s and early 1960s. The avenue, however, continued to access both the Taneytown and the Emmitsburg Roads. The original avenue in the direction of the Taneytown Road has been subsumed into the Cyclorama Center parking lots, with a new entrance located several yards south of the original. In 1902, the commission also built a 550' walkway behind the Stannard Monument, and a 760' walkway through Zeigler's Grove as an access to the tower.

Description: Hancock is a broad, open avenue which has become synonymous with the idea of the Battle of Gettysburg. The avenue

is straight and wide and is flanked by more monuments, cannon and markers than any other part of the Gettysburg Battlefield. When one first drives onto the avenue from either Sedgwick or United States Avenues the importance of the avenue announces itself first through the size of the monuments ahead, and then more subtly through the new black asphalt paving with deep gutters that accentuate the avenue's width. In addition to directing water runoff, the gutters prevent cars from pulling onto the grass. All along the avenue pavement markings now direct cars to park to the right side of the road. The setting is grand, with mostly open fields, but occasional post-and-rail fences surround fields now used as pasture, and stone walls designate battle landmarks, such as the Bloody Angle. Once beyond the Pennsylvania Monument, about one third of the way along the avenue, the view opens to the west, revealing several farmsteads which lay in the path of battle in 1863.

During the busy summer season the northern end of Hancock Avenue is one long stream of cars. If visitors did not climb out of their vehicles on any other part of their tour of Gettysburg, they will likely do so at this point, blending the sound of slamming car doors, the ends of audio tour tapes, Battlefield Guides concluding their dramatic telling of the battle, parents telling their children not to climb on the monuments, and people puzzling over the various historic movements of the field. Wayside exhibits, the monuments, the view, directional signs, and bollards all command the attention of the visitor. At the northernmost point of the avenue, drivers encounter concrete curbing and a choice to turn right into the Cyclorama and Visitor Center parking lots, or to turn left to the array of fast food restaurants, motels, and tourists shops awaiting their business on Steinwehr Avenue. The park map suggests that visitors go to the Soldiers' National Cemetery as the conclusion of their tour, which looks easy enough on the map, but in reality is more confusing.

Significant Features: The significant features of Hancock Avenue read like a Who's Who and a What's What of the Battle of Gettysburg. Battlefield attractions include: the Copse of Trees, the Pennsylvania Monument, Regulars monument, the Stannard shaft, the High Water Mark, the Bryan House, the Bloody Angle, and dozens of monuments and markers. Significant road features include deep gutters on either side of the avenue, a large War Department period culvert system at the junction of Pleasanton

and Hancock Avenues, and the traces of Harrow and Webb Avenues, which until relatively recently looped on and off Hancock.

22. Harrow Avenue

Material: Telford base. The subsequent paved surfaces were removed in the 1970s, and are now sodded and part of a general grassy area used by pedestrians.

Length: (Combined with Webb Avenue, the two loops off Hancock Avenue were 1470' long.)

Width: (20')

Location: Harrow Avenue paralleled Hancock Avenue along the High Water Mark, beginning at the curve in Hancock Avenue near the United States Regulars monument shaft to the south edge of the Copse of Trees, where it curved back onto Hancock.

Brief History: Because of its location along the High Water Mark, Harrow Avenue had been a heavily trodden footpath in the decades following the Battle of Gettysburg.²⁰⁶ The avenue received a permanent base in 1895-96. The NPS later removed Harrow Avenue in an effort to encourage people to explore the landscape on foot.

Description: Despite its official removal from Gettysburg, a solid line of monuments continues to define Harrow Avenue. The route is entirely open, with a full view west towards rows of fences, the Codori Farm, and the fields of the July 3 Confederate charge, north to the Copse of Trees, east towards monuments along Hancock Avenue and the farm buildings on the Taneytown Road, and south to the varied (and largest) monuments on the battlefield and the wooded landscape in the vicinity of Little Round Top.

Significant Features: The solid Telford base, packed into the ground through years of use and pressure from regular early maintenance with a ten-ton road roller, has made it rather hard to remove Harrow Avenue from the landscape. In dry weather, in particular, grass struggles to grow as the drainage qualities of

²⁰⁶ Emmor B. Cope, Folio Drawings, Open Shelves, GNMP - Archives. Cope painted a watercolor of the Hancock Avenue shortly after beginning to work for the commission. Paths crisscrossed the land. The footprints of Webb and Harrow Avenues were gleaned from these haphazard alignments.

the Telford avenues continue to whisk rain away from the ground's surface. The gutters extended by the CCC remain along the sides of the semi-obiterated avenue, perhaps as a continued drainage feature for the area. The stone-paved walkway leading from the U.S. Regulars Monument now leads to a patch of grass rather than the road edge.

23. Howard Avenue

Material: Telford base with an asphalt surface.

Length: (5150') [0.949 miles]

Width: (950' 16'w/4200' 20'w) [30'] 18' to 19'

Location: The avenue is a two-way route which stretches east and west at the northern end of Gettysburg. From the west it begins at the Mummasburg Road, crosses the Carlisle Road, and concludes at the Harrisburg Road.

Brief History: Howard Avenue was one of the original avenues created by the GBMA in the 1880s. The GBMA designed the avenue in October 1884, constructed it between September 1886 and the summer of 1887, and gave it its name in November 1887. The commission Telfordized the avenue in 1898. Howard Avenue is linked with the fighting of the first day, particularly the Eleventh Corp's holding of the battle line and then their broken retreat into the town of Gettysburg.

The first curve that one approaches if one is traveling on the avenue from the Mummasburg road denotes part of the past route of the Old Carlisle Road.²⁰⁷ A trace of the road remained at the time of the battle as a property fence line, which the First Ohio Light Artillery, the Sixty-first Ohio Infantry, and the Seventy-fourth Pennsylvania Infantry used as a natural point of defense. Sections of this property division and fence line still appear on Cope's 1903 "Map of the Gettysburg National Military Park". Rather than name the avenue after their General O. O. Howard, the Corps publicly announced and petitioned the GBMA for the avenue to be called Eleventh Corps Avenue.²⁰⁸

²⁰⁷ From a conversation with Woody Christ, at the Adams County Historical Society, 15 July 1998.

²⁰⁸ 3 July 1888, GBMA Minute Book, GNMP - Archives.

Description: Howard Avenue can be entered and exited from three major roads: Old Harrisburg Road, Old Carlisle Road, and Mummasburg Road. The entire avenue curves through open rolling farmland, with occasional specimen trees accentuating the landscape. The public landscape intermixes with the park land, the Old Alms House Cemetery, a county prison, an auto dealership, and Gettysburg College playing fields touching various points of the avenue. The only fences along the avenue border the graveyard and the auto dealership, with all the other points an uninterrupted line of grass. The route connects visitors to other sections of the first day's fighting. In fact, from Barlow Knoll the strategic lines along Oak Ridge are clearly visible, with a proliferation of monuments between Barlow Knoll and Oak Ridge. The road is heavily traveled as a "local" road and is only a secondary stop on the NPS Auto Tour Route, although several local tour bus companies actively interpret this part of the field.

Approached from Old Harrisburg Road, due northwest towards Barlow Knoll, the avenue enters a farm scape, with hay and corn fields on either side. After going up a slight incline, Barlow Knoll appears on the highest point in the near distance. Several monuments, tablets, markers, cannon, and trees, signify the importance of the site. Many layers of pavement over the years have elevated the road surface, resulting in broken edges when cars pull onto the shoulder. Along the entire avenue various efforts have been made to fill the long, narrow ruts, to prevent erosion and to keep tires from digging even further into the shoulder edge. Once at Barlow Knoll several periods of efforts to deal with the traffic are also apparent in the varied paving surfaces. To the north, a gravel pull-off serves as a parking space for a wayside exhibit and for those who want to walk around the knoll. At the inner curve, dark asphalt has crept closer and closer to the monument of Francis Barlow, so that cement wheel stops have been added on the grass to keep people from hitting or parking too close to the monument.

As one continues along Howard Avenue five gravel pullouts and three impromptu pullouts appear on both sides of the road, serving popular monuments and battalion markers. The sometimes sharp and sometimes slight curves of the avenue follow the topography and battle lines in a more marked way than is apparent on some of the other avenues today. Somehow the avenue defies being called a typical NPS road because its curves and angles reflect War Department construction. The old Telford base stones

have begun to appear along some of the road edges, showing the durability of the War Department road construction. Despite the culvert extensions, the heavy traffic, and the removal of the avenue fencing, Howard Avenue retains some of the formal grandeur of its early avenue days in the alignment of the avenue itself and the posture of the monuments against the unseen yet suggested Confederate lines to the north. Carlisle Road at the halfway point of the avenue, however, is a challenge to cross due to heavy traffic, some of which is due to commuters. The widened curves seem to have the commuter traffic more in mind than the visitor experience.

Significant Features: Southwest of Barlow Knoll stands the post-and-rail fence enclosed Old Alms House Cemetery. A few of the Telford based shoulder stones have begun to peek out from the sides of the pavement where the asphalt has worn, squashed, and broken away, particularly on the curves, which take a lot of strain from travel by large tour buses.

24. Howe Avenue

Material: Telford base with an asphalt surface.

Length: (1000') [0.730 mile, combining Wright and Howe] Howe only, 0.2 mile

Width: (16') [18'] 16'

Location: At the southern end of the park, Howe Avenue runs perpendicular off Taneytown Road, opposite Wright Avenue.

Brief History: The Gettysburg Park Commission decided in 1910 to open an avenue to Russell's Brigade of the Sixth Corps, seven years after Telfordizing the GBMA's Wright Avenue. According to Emmor B. Cope's map of existing features at the time of the battle, Howe follows the trace of an old farm lane, past what had been a field of wheat. The GBMA improved the farm lane into an avenue sometime before 1890, likely at the same time they improved Wright Avenue.²⁰⁹

²⁰⁹ Cope, "Crop Map," crop patterns inked on reduced versions of Warren Map, c. 1890s; "Map of the Gettysburg Battle-Field Showing the Public Roads and Union Avenues," GNMP - Archives; In the Annual Report for 1911, Nicholson wrote that Howe had been "opened by the Battlefield Memorial Association."

Description: The line of monuments facing south along Howe Avenue look like an army of granite soldiers holding the fringe of battleground. Howe contains the first line of monuments one meets when traveling north on Taneytown Road. The avenue extends into fields, partially shaded on its south side by a line of trees towards its eastern end, then dead-ends at a widened section of pavement, provided to ease turning. Mowed grass runs from the edge of the pavement to the fields, without any other boundary demarcations between the formal and agricultural landscape.

Significant Features: Howe Avenue contains two unusual drainage features. Runoff from the surrounding fields seems to be directed right at the end of the avenue, where a retaining wall has been constructed to protect the road and deflect water. Halfway down the avenue a large Gettysburg granite culvert stands with an open through-like basin to catch water. The culvert was constructed 13' at its longest point and 7' at its widest, and catches water from the northwest corner and drains into an iron grate at the southeast corner.

25. Humphreys Avenue

Material: Macadam base with asphalt surface.

Length: (550') [0.097 mile]

Width: (16') [36'] 18'

Location: Humphreys Avenue completes a triangle of avenues around the Pennsylvania Memorial, running on the east side of the monument from Hancock Avenue in the south to Pleasonton Avenue in the north.

Brief History: The avenue was constructed in 1911 but was not named until 1914, in recognition of Major General A. A. Humphreys, of the Third Corps. The avenue has primarily a utilitarian role as access to parking for visiting the Pennsylvania Monument and rest room facilities.

Description: For such a short avenue, there is quite a bit of activity around the avenue. Except for its iron War Department avenue sign announcing its name, little about Humphreys suggests an avenue of interpretive importance, except to serve the Pennsylvania Monument. The avenue's existence, however, allows for a better flow of traffic along Hancock Avenue, keeps parking

for restroom and monument visitation away from the larger avenue, and provides a focus for NPS interpretive programs in the vicinity of other major park attractions. Humphreys is one-way from Hancock to the southern edge of the parking lot, and then two-way to Pleasonton Avenue. Because the focus of the avenue has become to serve automobile and public needs, there is an extensive use of concrete wheel-stops to prevent cars from pulling onto the grass, both along the avenue and at the ends of each designated parking space.

Significant Features: The avenue provides parking and access to the Pennsylvania Monument. During the warmer months of the year the land west of the avenue is used as a camp and staging ground for occasional battle reenactments.

26. Hunt Avenue

Material: Macadam base with asphalt surface.

Length: (2950') [0.54 mile]

Width: (18' with a 50' fence to fence right-of-way and an 11" depth) [22'-25'] 16'-16 1/2'

Location: Hunt Avenue extends east-west from the Taneytown Road at General Meade's Headquarters to the Baltimore Pike, south of the Soldiers' Nation Cemetery and Evergreen Cemetery.

Brief History: When the commission first acquired land for Hunt Avenue in 1912, it was essentially an extension of Meade Avenue because it ran from the eastern end of Meade Avenue at the Taneytown Road. By the time that the avenue was completed in June 1913, it had been named in honor of Brigadier General Henry J. Hunt, Chief of Artillery, Army of the Potomac, and represented the artillery line of supply during the battle. The commission had many problems with this avenue's surface and edges. The nature of the ground was unstable and did not respond well to the less substantial and less costly macadam base that the commission chose for construction, although the commission did not cite the road base as the cause of the problem.²¹⁰

²¹⁰ Annual Report of the Gettysburg Battlefield Commission, 1915.

Description: Hunt Avenue is currently a two-way road. Throughout the summer months the western entrance to the avenue passes a crudely roped-off field for Visitor Center and Cyclorama overflow parking on its left. After this brief open section, the avenue passes into a canopy of trees, crosses a one-way bridge, takes two sharp curves, then enters fields again, only this time flanked by wood fences. Deep gutters on both sides of the avenue force cars to take the curves more slowly for fear of getting their tires caught in the depressions. The access on the Baltimore Pike is obscured by developed private land on both sides of the avenue right-of-way, including a local crafts business and a recreational vehicle sales center.

Local traffic, tour buses, tourists and park employees all depend upon this avenue as a connecting route between the Taneytown Road and the Baltimore Pike, not only to avoid the congestion at the Steinwehr intersections and the Visitor Center, but also as a logical route connecting the Culp's Hill section to the rest of the tours. This avenue will be significantly altered when plans for the new Visitor Center take fruition.

Significant Features: A War Department bridge provides drainage for the wetland. In preparation for the Annual Reports, Emmor B. Cope completed a report that said the commission had used "Department store steel work" for the culvert bridge railings.²¹¹ The bridge is essentially a one-way structure, especially when facing a tour bus.

27. Jones Battalion Avenue

Material: Originally a packed earth road, macadam surfaced by the CCC.

Length: [none given] 0.3 miles

Width: [12'] 10'

Location: Associated with the first day's fighting, Jones Battalion Avenue is north of the Borough of Gettysburg, and east of the Harrisburg Road (Business 15) in the middle of a suburban housing development.

²¹¹ Cope, Avenue Log, 111.

Brief History: The avenue is one of the few peripheral sites that the GBMA passed on to the War Department which preserved a record of Confederate troop activities in the Gettysburg area. The avenue remained a packed earth road until it was macadamized by the Civilian Conservation Corps in 1940.²¹²

Description: The only way to find Jones Battalion Avenue is to stick closely to a map and keep an eye out for a Confederate Battalion marker and a fading, battered green and white "open hours" sign. There is no iron avenue marker to give dignity to the entrance. The avenue turns south off Old Harrisburg Road across from a large high school, constructed in 1997, and into a housing development of single-story ranch style homes. After a long, straight approach, the avenue curves left, revealing a paved pull-out on the left, a broad turn around loop, two markers and four 3" parrot rifles. These guns are particularly important to this avenue because little else distinguishes the location from the neighboring yards. No fences enclose any of the avenue, the enclosure coming more from the mowed yards, wood piles and gardens of the neighborhood. The drainage systems, put in by the CCC, are thick concrete culverts which appear at the loop and at two points up the avenue. The entire avenue is markedly elevated from the surrounding landscape, giving the avenue what little distinction it has in its otherwise seemingly overlooked position. Grass has begun to grow in the cracks and over the edges of the pavement. Overall, the avenue offers a time-capsule of CCC construction and 1930s avenue aesthetics. It also shows the consequences of development when it encroaches directly onto the border of narrow avenue properties.

Significant Features: The avenue is one of the few that represents the Confederate activities. Jones Battalion Avenue was not named until after the NPS took over the park, at least it is not listed in an information guide about the park published in 1932.²¹³ It is also the northernmost avenue in the Gettysburg National Military Park.

28. Kilpatrick Avenue

²¹² Photograph, Superintendent's Annual Reports, January 1940 - December 1940, GNMP - Archives.

²¹³ The Location of the Monuments, Markers, and Tablets on the Battlefield of Gettysburg, 38.

Material: Dirt and grass.

Length: [1 - 500'/2 - 1500']²¹⁴

Width: [1 - 30'/2 - 30']

Location: Exactly where Kilpatrick Avenue was or is located is up for debate. In July 1888 the GBMA Executive Committee authorized opening an avenue along the line occupied by General Kilpatrick's Division of Cavalry, from Round Top to the Emmitsburg Road. In drawings made by the War Department in 1897, Kilpatrick Avenue follows the base of Big Round Top.²¹⁵ Maps which show the projected plans for the avenues reveal a network encompassing a much greater area than actually was developed. The maps show, for example, South Confederate Avenue extending further southwest at Plum Run and connecting with South Cavalry Field. Traces of this survive in the two small avenues which now run perpendicular to Emmitsburg Road south of Ridge Road, one east and one west. The park owns a long section of property perpendicular to Ridge Road near Heagy's Woods that follows the path of the proposed avenue. The most recent NPS Classified Structures Reports calls both avenues Kilpatrick, but no other evidence at the time of this report supports that information.²¹⁶ None-the-less, the two small avenues are the ones that are described here.

Brief History: Please see location notes above.

Description: If one is not looking for the two sections of Kilpatrick Avenue while driving along Emmitsburg Road, they can easily be missed. The sections appear as little more than open

²¹⁴ The GBMA and commission left no apparent records of the widths and lengths of this avenue, and since there is no paved surface to record, this report relies upon the figures determined by the NPS study of 1994.

²¹⁵ E.B. Cope, "Plan of Sedwick and Sykes Avenues and Portion of Kilpatrick Avenue," Gettysburg National Park Commission, 1897, Blueprint #310.

²¹⁶ *List of Classified Structures, Gettysburg National Military Park, 1994, Single Entry Report, "Kilpatrick Avenue,"* IDLCS: 81119, Structure Number: RD358, and "Kilpatrick Avenue Extension," IDLCS: 81147, Structure Number: RD359.

grassy areas extending back from the road, like the mowed extensions of suburban yards. The first section, if traveling north on Emmitsburg Road, appears on the right where three markers line the road. Because of erosion, entrance to the avenue is now blocked with a fragile-looking chain, so anyone who ventures onto the avenue must do so on foot. The grass-covered avenue follows the trees on the north edge of the property, then curves to the south, ending abruptly at a tall hedge. Tires have also worn a path into the avenue, but have not obliterated the mounded and sloped roadway nor evidence of drains.

A few yards up the Emmitsburg Road another avenue appears, on the left, north of a ranch house. Most of the avenue is lined with trees, some obscuring cement and gas pipe fences. The brigade marker looks more like a road block in its uncharacteristic position in the middle of the avenue. Like the section of Kilpatrick on the other side of the public road, this one also is mounded, firmly sodded, and shaped for good drainage.

Significant Features: The lands around Kilpatrick Avenue are the most southern points of the GNMP. Having never been paved, they represent the GBMA period of avenue construction.

29. McGilvery Artillery Avenue

Material: Telford base with asphalt surface.

Length: [not listed]

Width: [not listed]

Location: The commission gave the name McGilvery Artillery Avenue to that section of the east-west Wheatfield Road between Birney Avenue and the section of Sickles Avenue which leads to United States Avenue. The avenue borders the north side of Excelsior Field.

Brief History: According to Nicholson's Journal, the Gettysburg Park Commission named the avenue in 1914. The history of its construction follows that of the Wheatfield Road. Prior to the battle this section of road had been part of a township road.
Description: Nothing about this avenue distinguishes it from the rest of Wheatfield Road, except an asphalt pull-out on the south side of Wheatfield Road, some artillery, an artillery battery monument, and an iron avenue sign. A tall shade tree stands at the eastern edge of the pull-out, one of the few mature trees in

the area. The fresh black asphalt makes the space look all the more important. The site is the starting point of a Ranger Program about the Peach Orchard and is also a popular stopping point for Battlefield Guides.

Significant Features: McGilvery Artillery Avenue serves as more of a place to pull over on what can be a busy two-way road. Visitors to the Peach Orchard also park at this location, a purpose advocated by the convenience of a set of stairs leading to the orchard.

30. Meade Avenue

Material: Now a 5'-10" asphalt walkway and expanse of grass over a 20' Telford base.

Length: (950')

Width: (20') 5'-10"

Location: Meade Avenue is now part of the High Water Mark Walking Tour which leads from Meade's Headquarters on Taneytown Road and Hancock Avenue.

Brief History: In July 1887, the GBMA proposed opening an avenue in honor of General George G. Meade "to lead from the Taneytown Road to the Main Avenue" directly north of Meade's Headquarters, with the commission Telfordizing it ten years later. Meade Avenue no longer exists as a roadway. First shortened with its Taneytown Road access cut off in the 1930s, as a way to control the flow of traffic into the park, the avenue was entirely removed when the area was redeveloped for the new Mission 66 Visitor Center complex, which was completed in time for the 1963 centennial of the battle. Visitors still follow the solid and indelible base of the avenue along a paved walkway.

Description: What had once been Meade Avenue and one of the routes connecting Hancock Avenue with Taneytown Road is now a broad path of grass with a narrow section of asphalt pavement to guide pedestrians. The old avenue is now part of an open landscape, its major landmark, Meade's Headquarters, a dominant feature at one end, the Cyclorama Center claiming much of the horizon on the other. Several monuments, markers, and tablets and the white picket fence around the Headquarters still draw attention to the significance of the old avenue. Pedestrians approaching the High Water Mark up the gentle slope of the path

are treated to the broad landscape in ways that one driving the avenues above does not get to experience.

Significant Features: The Meade Headquarters (Leister House) still has its Mission 66 audio program, for tourists who want to stand on the porch and peek inside while hearing tales of the events.

31. Meredith Avenue

Material: Telford base with an asphalt surface.

Length: (1950') [Meredith and Stone, 0.501 mile] Meredith only, 0.35 mile.

Width: (16') [18'] 20'

Location: Meredith is a one-way avenue approached from Chambersburg Pike via Stone Avenue, northwest of Gettysburg. After bordering the southern part of Herbst's and McPherson's Woods, Meredith exits onto Reynolds Avenue. The avenue encompassed part of an old lane which accessed the Katalysine Springs Hotel, a popular resort facility which had been constructed in 1869 and also served as the route for a horse-drawn railway.²¹⁷

Brief History: The commission acquired some of the lands for the avenue from the GBMA in February 1896. Emmor B. Cope labeled most of Meredith and Stone Avenues "poor earth roads" in 1899, and the commission improved all of Stone and part of Meredith in 1903. The GBMA had used the southern section of Meredith Avenue without conflict from the Springs Hotel proprietors, but when the commission tried to obtain ownership of part of this land it encountered difficulties. The avenue's "progress to a junction with Reynolds avenue, a distance of only 800 feet," wrote Nicholson in his Annual Report for 1903, "has been thwarted for the present by the receivers of a speculative 'land improvement company,' who refuse to grant right of way over, or convey title to, the small strip of land needed for said avenue except upon such inadmissible terms and conditions." The commission resorted

²¹⁷ Bloom, *A History of Adams County, Pennsylvania*, 264.

to condemnation proceedings and finished constructing the avenue by late 1904.²¹⁸

The NPS realigned Meredith Avenue in the 1930s, reducing the curve which linked Stone and Meredith Avenues. Whereas the commission constructed a retaining wall to secure part of the steeper grade, the NPS cut into and banked the slope for the new serpentine curve, which has had erosion problems ever since. During roadwork in the last few years, the NPS limited access from Meredith onto Reynolds Avenue, by forcing traffic to turn north. They added a "No Right Turn" sign and removed pavement at the intersection which had facilitated the turn.

Description: Meredith is now a broadened avenue, which combines woods and open fields as its main landscape features. Rather than a curve which follows the topography and the lines of defense, as the commission intended, the avenue now has a grand curve typical of other National Parks, with superelevation sweeping automobiles around a large backwards "question mark" series of curves. As one approaches the line of woods where Meredith begins, it is still apparent sixty years after the alteration that the avenue went straight and then made a sharp turn, rather than the gradual approach the road takes today. Along the curve, recent road work included adding deep asphalt gutters and "suggested parking" white marks on the pavement, even after a sign announces for all vehicles to park on the right and on the pavement only. So many people had been pulling onto the grass near John Burn's statue, on the left hand side of the road, that the NPS installed in the summer of 1998 a tall temporary mesh fence. Road work over the years has resulted in the monuments no longer fitting the landscape; they seem perched for the convenience of the road rather than the other way around. The avenue ends at a "T" at Reynolds Avenue.

Significant Features: Meredith Avenue travels part of the old route of the Springs Hotel horse drawn trolley route, which used to bring passengers up from the train station to the popular spa. All traces of that part of the region's history seem to have disappeared into woods, shielding whatever may be left of the old hotel foundations or grounds. At the end of the avenue one can glance up the old Reynolds Avenue Extension through Reynolds

²¹⁸ Cope, "Map Showing Avenues, Pikes and Roads on Battlefield of Gettysburg."

Woods, where General Reynolds was killed. Meredith also follows the line of the Iron Brigade.

32. Neill Avenue

Material: Earth and grass.

Length: Unable to determine this measurement because vehicles are not allowed on the avenue.

Width: [none listed]

Location: Neill Avenue is west of Rock Creek and about two-tenths of a mile east of the Baltimore Pike. No longer accessible via automobile, one must obtain permission from the property owner whose lands surround the avenue, approach Neill Avenue on foot through NPS hinterlands or else through the local landowner's farmyard.

Brief History: In 1887 the GBMA decided to visit the position occupied by Neill's Brigade of the Sixth Corps, and to purchase the land and an access right-of-way. They acquired land beginning at McCallisters' Mill, then up a slope to access the line of Neill's Brigade. The avenue used to connect to an old trace which linked the Baltimore Pike and Hanover Road. Some references to monuments on Neill Avenue refer to them as being located on Wolf Hill.²¹⁹

Description: If approaching Neill Avenue through the old Baker Farm, one passes through a pre-Civil War farmstead and up an undulating rocky slope now used as a cattle pasture. At the top of the rise the land levels to an open pasture. Visible at its northern end, a fieldstone wall cuts a straight line, marking the southern edge of Neill Avenue. The avenue contains four Union regimental monuments and one Brigade marker. The portion of the avenue that commemorates Neill's Brigade is divided into two sections, half flanked by low stone walls next to the pasture and shaded with trees of all sizes, the other half a thickly tree-covered path which heads deeper into the woods, ending with a loop around the Sixty-first Pennsylvania monument. The "path" is wide enough for sizable vehicles. An avenue marker stands at the

²¹⁹ Kathy Georg Harrison, *The Location of the Monuments, Markers, and Tablets on Gettysburg Battlefield* (Gettysburg: Thomas Publications, 1993), 8.

far west side of the avenue, facing north. The Gettysburg Park Commission positioned the marker to be visible to anyone approaching the avenue through what was intended to be the official circulatory route, across a ford over Rock Creek and up the hill from the northwest. The trace of a road still leads through this government property to Neill Avenue. At some point this road had been improved because although over-grown now, its surface is more solid and level than the other roads leading from McCallister's Mill into the woods. Old maps and plans show a variety of ways that the spur was meant to connect to the larger avenue system, none of which came to fruition.²²⁰

Significant Features: Besides its historical associations, the most notable feature of Neill Avenue is that it remains basically inaccessible, thereby remaining one of the few records of what GBMA Avenues looked like. At the easternmost point of the avenue is an iron sign marking the "Right of the Infantry of the Army of the Potomac," as well as a "US" Gettysburg granite boundary marker that the War Department placed as part of its land surveys. Although perhaps not good for the monuments, the west end of the avenue also remains "historic" in its grass mowing system. . . cattle grazing.

33. North Confederate Avenue

Other Names: Ewell Avenue

Material: Telford base with asphalt surface (The type of base was not listed in the annual report nor in Cope's Avenue Log, but at \$1.99 per foot, the cost of construction equals that of other avenues constructed on the Telford system.)

Length: (2365') [0.356 miles] 0.35 miles

Width: (16') [18'] 16'

Location: North Confederate Avenue is a relatively short stretch of road, and as its name implies, it represents the northern

²²⁰ Storrick, *The Battle of Gettysburg: The Country, the Contestants, the Results*, 40-41. Storrick showed the network of roads leading to and labeled Neill Avenue. The 1966 edition of the guidebook showed the same map, even though the route had ceased to be accessible.

lines of the Army of Northern Virginia. North Confederate is accessible from Mummasburg Road, its entrance directly across from Buford Avenue, its exit a natural entrance to Doubleday Avenue on the slope of Oak Hill.

Brief History: The commission opened and Telfordized the avenue in 1905, marking the positions of four Confederate Batteries and a section of Whitworth guns, which were unusually powerful and accurate guns imported from England. The NPS removed the northern tip of North Confederate for the Peace Light Memorial and parking in the late 1930s.

Description: North Confederate is mostly an open section of road which traverses in a great arch to and from Mummasburg Road. Since its construction in 1938, the dominating feature of this avenue has been the Peace Light Memorial, its importance all the more proclaimed by the amount of parking space dedicated to it. The NPS shortened the avenue's northward arch and tried to obliterate the old roadway, but an astute observer can still see where the avenue ran and trace its relationship to the tablets which used to mark its path. Likewise obvious, especially on a busy summer day, is the amount of space dedicated to automobiles visiting the memorial. For anyone visiting the memorial and standing on its overlook for a view of the battlefield, their first sight is the row of cars and buses, the lines painted on the asphalt, and the solid line of cement keeping cars from rolling on down the slope towards the Mummasburg Road.

Despite the continuous flow of one-way traffic and its accompanying features, the avenue does command one of the loveliest views in the park. A hayfield fills the inside of the avenue's arch, contributing to the uninterrupted view to the south of the rows of Union monuments on Doubleday, Buford and Reynolds Avenues and Chambersburg Road. Markers from most the periods of the park's development inform visitors to the field, including War Department Brigade markers and artillery tablets, the Peace Memorial, and the most recent variety of color computer-generated wayside exhibits. The final section of the avenue is partially covered by trees, then opens for a vista towards the town of Gettysburg and the railway line at the base of Oak Ridge. The side of the avenue is graveled to protect those areas worn from visitors pulling over to appreciate the view.

Significant Features: The avenue reaches the northernmost point of the main avenue system. The pair of English-imported Whitworth guns, attract a lot of attention from artillery-minded visitors. The Peace Light Memorial and the picturesque scenery from the high point of Oak Ridge have long been significant features of this road.

34. Pleasonton Avenue

Material: Telford base with asphalt surface.

Length: (1594') [0.307 mile]

Width: (16') [24'] 16' at east end, gradually widening to 17' near west end.

Location: Pleasonton Avenue creates a straight east-west connection between Taneytown Road to the east and Hancock Avenue to the west.

Brief History: The avenue received its name on 3 September 1890 and was Telfordized in 1901. At the intersection of Taneytown Road the Gettysburg National Park Commission built a storage shed to house the new road-roller the commission purchased in order to aid them in avenue construction and maintenance. The original structure survives as the central brick building of the park's expanded maintenance facility.

Description: The Pleasonton Avenue entrance off Taneytown Road takes drivers between the Hummelbaugh Farm buildings on the north and a sprawling series of maintenance buildings on the south. The northern side of the avenue depicts the agricultural and rural character of the battlefield, beginning with the fence treatment near the Hummelbaugh House. There is a post-and-rail fence around the farm fields near the Taneytown Road and a white picket fence around the homestead. Across this landscape, however, the row of monuments along Hancock Avenue appear in the distance, with granite and bronze men and horses perfectly positioned to appear as if strolling and riding across the horizon to the intense activities at the High Water Mark. The southern side is lightly wooded, some areas thick in the background, others thinner and near the avenue. The trees and a high, solid, wood fence helps to hide the structures, refuse, and numerous vehicles of the park maintenance building. The avenue receives heavy use not only from tourists, but also from the varied government vehicles whose entrance is off Pleasonton.

Layer after layer of asphalt and other paving surfaces are now visible at the worn edges of the avenue, particularly on the north side where several monuments lure drivers off the road.

Significant Features: The avenue was named after General Alfred Pleasonton. The Pennsylvania Monument is the grandest of the avenue's attractions, the Fifteenth and Fiftieth New York Engineer's depiction of their castle-like insignia one of the most immediately noticeable. Important to the development of all the park avenues, however, is the red brick building at the avenue's east end. The middle section which faces the avenue was built by the commission to house the road construction and maintenance equipment. At the north side of intersection of Pleasonton with Hancock Avenue survives a large culvert from the War Department era. Constructed of dressed Gettysburg granite, two squared cap-stones finish off the headwall to form a ninety-degree angle, catching and directing runoff under the road towards the south. The rectangular stones measure 6' x 2' x 6" deep. The NPS altered the southern side of the culvert, recreating a wetland area where the commission had maintained a well-drained landscape.²²¹

35. Reynolds Avenue

Material: Telford base with asphalt surface.

Length: (5225'/Reynolds Branch Avenue 492') [0.977 mile]

Width: (20') [22'] 19'

Location: Reynolds Avenue extends in both directions, in the south from Hagerstown Road, crosses Chambersburg Pike and the Western Maryland Railroad, and ends at a "T" intersection with Buford and Wadsworth Avenues. The avenue covers a broad area of the first day of fighting west of Gettysburg.

Brief History: This avenue was first proposed in October 1884 as part of a sweeping avenue which was to encompass a route from Harrisburg Road by way of Oak Hill and Reynolds Grove to the extreme left of the Union line on the Hagerstown Road. In May 1885 the GBMA requested that John B. Bachelder plot an avenue

²²¹ This landscape was particularly visible in a panoramic photograph taken (from the east to the west) of Camp Colt in 1918. The drawing is in the collection of the GNMP - Archives, but had not been catalogued at the time of this research.

from Mummasburg Road "on the Seminary Hill by way of the line of battle to the grove in which General Reynolds was killed." When constructed, the avenue also crossed the Spring Hotel Road. Over the years the avenue has had several alterations at the railroad cut crossing, seeing three different bridges over the same location. The final bridge, part of the Mission 66 plan to improve park facilities, involved significant grade changes to accommodate the railroad's specifications. Several monuments were moved and are now hard to see from the avenue, which encourages people to park their cars walk down the slippery grass slopes to get a better look.

Description: Reynolds Avenue extends in one long straight line across McPherson's Ridge, interrupted only by monuments, artillery and a few specimen trees. The avenue follows the topography of the ridge and reveals the importance of that topography in the first day of fighting, as little about the alignment of the avenue reflects the more common park roads represented in National Parks. Active farm fields slope towards Gettysburg in the east, interrupted by the trees and buildings of the Lutheran Theological Seminary. To the west, yet more fields and then a band of woods define the landscape. Other features of the avenue, such as the signage and sodded, sloped banks to the pavement edge, do declare this a park road. The entire east side of the avenue resembles a long pull-out where vehicles weave their way on and off the avenue in front of monuments and markers. A few of these pull-outs are asphalt paved, the rest covered with gravel. Battlefield guides like to unload their guests, whether a carload or a full bus of visitors, at Reynolds Grove and lead them amidst the trees to give animated details of the first day of fighting. To keep cars from pulling over towards the west side of the road to read the wayside exhibit from their cars, the park has placed obelisk cement bollards. Visitors must now get out of their cars to inspect the signs.²²²

²²² One of the best and only interpretive signs which discusses the development and current appearances of the park appears near Reynolds Woods. One of the two wayside exhibits explains the different types of markers that one sees throughout the park, particularly those put up by the Gettysburg National Park Commission. The park today could benefit from having such information repeated at the Visitor Center, where many people begin their visit. Few people get out of their vehicles and inspect the markers where they are.

There is a lot of traffic on this route because it is the beginning of the Gettysburg National Military Park "Official Map and Guide" pamphlet and audio auto tour. The avenue also serves as a way to get from Chambersburg Road (Route 30) to the Hagerstown Road without facing the confluence of roads in town. The sheer volume of traffic is all the more evident in the traffic lights that have been installed at the crossroad with Chambersburg Pike, the only place in the entire park that seems to have lights installed because of park activities. The posts jut up out of the fieldscape, effective in conducting traffic but disruptive to the view onwards along Reynolds Avenue and the expanse of fields, including the Eternal Light Peace Memorial, ahead. Just north of Chambersburg Road a bridge constructed by the park in the late 1950s crosses the Western Maryland Railroad. In its current configuration, the crossing seems to be more about the railroad than the trench like Railroad Cut and monuments to the soldiers that fought there. The monuments have been displaced to the sides of the bridge, belittled by the mound of sodded dirt which carried the bridge up to railroad regulation clearance height.²²³

Significant Features: Bridge over Western Maryland Railroad, Reynolds Grove, first stop on the park Auto Tour, McPherson's barn, view of Lutheran Theological Seminary domed cupola.

36. Robinson Avenue

Material: Telford base with asphalt surface.

Length: (950') [0.153 mile]

Width: (16') [18'] 15'-1/2"

Location: Robinson Avenue is northwest of Gettysburg on the slope of Oak Hill. It connects Doubleday Avenue to Mummasburg Road.

Brief History: The land was acquired from the memorial association in 1896, and piked by the commission in 1898. Previous to the commission realigning the avenue, it passed north

²²³ "Standard Clearance Requirements-Highway Overpass," issued by Western Maryland Railway Co., 3 October 1959. File "Reynolds Avenue Bridge, Mission 66," RG 37, D30 Gett 1959-64, National Archives, Mid-Atlantic Region, Philadelphia, Pennsylvania.

of the monuments. The old avenue trace is still visible. The avenue was named for General John Robinson, whose statue stands at the summit of Oak Ridge.

Description: Robinson Avenue is a two-way avenue which swoops across the open slope of Oak Hill. Beginning on Mummasburg Road at the base of the hill, just after passing over the still heavily traveled Western Maryland Railroad tracks, the avenue travels directly south, then after passing the Thirteenth Massachusetts Volunteers monument, practically turns back on itself to reach the summit of Oak Hill. In full view throughout the short route are the now stunted Oak Ridge tower above, and the Gettysburg College playing fields and buildings below. Tall oak trees line the upward slope of the avenue, as much for shade and landscaping as to prevent erosion on the slope. Deep, wide gutters on the upper side of the avenue direct rain runoff into the nearby fields. Gutter stones from the War Department avenue extensive gutter system have appeared at the top of the hill, durable beneath asphalt that has long since given way to automobile traffic.

Significant Features: School children and other large groups used to get off passenger trains at this point and walk up the avenue and across the slope to the Oak Hill Tower and the Peace Memorial. The traces of early gutter system are also significant for their durability and effectiveness and as a reminder of the War Department's construction standards.

37. Sedgwick Avenue

Material: Telford base with asphalt surface.

Length: (2841') [0.521 mile]

Width: (20') [20'] 18' beginning at the southern end, growing successively wider to 20' near the intersection with United States Avenue.

Location: This avenue extends north-south along Cemetery Ridge from Wheatfield Road to United States Avenue, ending east of the George Weikert Farm. Although not on the most recent version of the Gettysburg National Military Park Auto Tour, the avenue is one of the main arteries along Cemetery Ridge.

Brief History: First laid out in 1882, Sedgwick Avenue was originally part of Hancock Avenue, but the GBMA decided in April

1888 to rename a section of the avenue for General Sedgwick, who occupied the ridge to the east of this avenue. The commission improved the surface of the avenue in 1897, at the same time making it part of an experiment to create a more durable road surface for use throughout the park. The avenue, wrote Cope in his avenue log, was "done in three Experimental Sections, which he detailed:

Viz: The Foundation is the same the whole length. 8 inches thick, this foundation covered with crushed granite whole length 5 in thick. Section 1 (next to Hancock Avenue or North Section): no clay, 1/2 in. limestone screenings put on three times, sank out of sight, 1/2 in. granite screenings. Section 2 (middle): 1/2 in. granite screenings, put on three times, then 1/2 in. limestone screenings, no clay. Section 3 (South end): 1/4 in Red Clay, 1/2 in. limestone, then 1/2 in. granite screenings. The whole avenue was next year covered with 1 in of crushed traffic screenings." Pleased with his work, he concluded, "It is a very good avenue."²²⁴

The southern section of the avenue was slightly realigned in the 1930s when the NPS made significant alterations to Sykes Avenue, creating a curve which arched towards the east whereas the commission had constructed a curve to the west, more centrally located for the monuments which flank the avenue. At the time of reconstruction, the park boundary at the northeast corner of the intersection only included avenue access. The footprint of a restaurant, called "Round Top Restaurant," was planted right on the extreme edge of that boundary, apparently still in operation.²²⁵ A photograph in the Annual Report for 1898 reveal that before the restaurant, a two-story wood frame house occupied the site, complete with a white picket fence.

Description: Sedgwick Avenue is characterized by pleasantly unpredictable curves, which seem to dodge big boulders, combined with a straight section of pavement with few surprises. The one-

²²⁴ Cope, Avenue Log, 63, GNMP - Archives.

²²⁵ Bureau of Public Roads, "Relocation plan for Sykes Avenue, Intersection with Wheatfield and Sedgwick Avnues, May 1935, Project 243-3A3-4A4-5A5. Drawer MC8 DR B, NPS Avenue Construction Relocation, File 6 of 35, GNMP - Archives.

way route begins at the slightly open intersection of Sykes Avenue and Wheatfield Road. A proliferation of monuments near the road and some in mowed alcoves between the trees, add interest to the avenue. As one begins the drive, it is not really clear where exactly the route will take you because the view from the intersection reveals a curve disappearing into the shade of a grove. Anyone who chooses to take the route soon finds themselves curving through an allee of trees, then with a pasture opening to the west, eventually opening to the fenced lands around the Weikert Farm. The north end of the avenue is more about the approach of Hancock Avenue; as soon as one passes out of the trees the horizon fills with the monuments ahead. Throughout most of the avenue the random pull-outs are gravel, following automobiles' lead of points of interest. Near the north end of the avenue, however, is a paved pull-out for tourists wanting to visit the tall New Jersey Infantry Brigade monument to the right in the woods.

Significant Features: Sedgwick Avenue has retained its curved alignment which characterizes the southern half of the avenue. Where the avenue moves westward the stone wall represents a line of breastworks.

38. Seminary Avenue

Material: Telford base with asphalt surface.

Length: (2500') 0.35 mile

Width: (20') 19'-4" at the northernmost edge, the rest 23'

Location: Seminary Avenue is historically part of West Confederate Avenue, running north-south on the northern section of Seminary Ridge. The avenue connects Chambersburg Pike and the Hagerstown Road. The avenue bisects the Lutheran Theological Seminary, whose location in the western side of Gettysburg made it a play an unwilling central role throughout the entire battle.

Brief History: Seminary Avenue was one of the first avenues in the park piked after the Park Commission took over Gettysburg's administration. It was piked in fall 1895.

Significant Features: Fortifications constructed by the Confederate troops on 4 July 1863 still stand as a stone wall along the east side of the avenue, near the Chambersburg Road. The domed cupola on the Seminary's main building serves as a

visual reference to anyone studying the battlefield today, just as it served as a key lookout during the battle.

39. Sickles Avenue

Material: Telford base with an asphalt surface.

Length: (8030') It is unclear from Cope's drawing in his personal log of avenue development if the length represents the entire avenue or only the section on the page in his informal record. (1515' between 1895-97, south side of Warren Avenue to Brooke intersection, 6515' constructed in 1896, from intersection to Emmitsburg Road) [0.954 mile] 1.7 miles including the Wheatfield Road connection.

Width: (20') [18'] 16'-17' through the Devil's Den area, 19' from the north edge of the loop to U. S. Avenue, 17' from U.S. Avenue to the Emmitsburg Road.

Location: Sickles Avenue follows a winding course across a central section of the park, south of the Borough of Gettysburg, for the most part following the positions of Sickles Command from Devil's Den in the south, to the open fields near Emmitsburg Road in the north.

Brief History: From the earliest days after the Battle of Gettysburg, the scenes of fighting later connected along this route were some of the battlefield's major attractions. The original layout for Sickles Avenue was proposed by the members of the GBMA Board in October 1884 to begin east of Devil's Den and along its current route to where it joins the Wheatfield Road, except for the Loop. The avenue began at the junction of the west end of what is now called Warren Avenue. The Devil's Den section of the avenue was originally named for General Crawford in 1887, not being named for Sickles until at least 1895. The section of Sickles Avenue which begins at the Wheatfield Road, crosses United States Avenue, and ends at Emmitsburg Road was named for Sickles in 1887, but does not appear on any available maps until 1890. The commission slightly realigned Sickles Avenue around Devil's Den and in the area between the Wheatfield and Emmitsburg Roads, where they added the curves to reflect the known battle lines. The commission Telfordized the avenue 6515' in 1896 (across Wheatfield to the Emmitsburg Road) and in 1897, 1515' from Warren Avenue and around Devil's Den. They then added The Loop in 1899, generously skirting the Twenty-eighth Massachusetts Infantry to the west whereas the GBMA route cut a direct path near its eastern base. Soon after, the commission

also added paved walkways and an outhouse in 1902 to ease visitor needs in the area.

Description: This avenue is difficult to characterize, except that it takes in perhaps the greatest variety of landscape experiences in the Gettysburg National Military Park. Beginning at the south end, the avenue skirts between the base of the Devil's Den boulders and Plum Run. In its more recent incarnation, the road construction included asphalt curbs to keep vehicles from pulling onto the grass to park. Four sections of parking, some with stone walls to stop cars from entering Plum Run and other with molded-asphalt wheel stops, appear wherever space could be found for a few cars. Following the contours of the land and the path of least resistance around the rocks, Sickles winds its way past all the parking to the top of Devil's Den. Most visitors, if they have not already climbed Devil's Den while leaving their car in the parking lot below, pull onto the side of the avenue and explore the attraction from the upper vantage.

After passing through a section of woods and the intersection of Ayres and Brooke Avenues, the low-lying Wheatfield opens with a scattered profusion of monuments. This section of the avenue is on the Auto Tour, so it gets heavy visitation, particularly the wayside exhibit. The avenue lies low through the field, the grass and monuments just elevated enough to seem eerily to float. The variety and number of culverts, likewise, suggest how low and damp the ground can be. At the intersection of DeTroband is the remains of a War Department culvert, topped now with molded concrete instead of the usual dressed Gettysburg granite. concrete culverts. The three other pairs of culverts in the field are of the arched stone type characteristic of the CCC roadwork in the 1930s. Anyone who does not pause at least for a moment at the exhibit or to stare out across the field will pass through the open space of the Wheatfield too quickly. The Loop begins as soon as one enters another section of trees, where some of the monuments are very lifelike in their stances in the woods, most gazing out at the fields to the west.

The latter half of Sickles Avenue traverses the open fields east of Emmitsburg Road. From the avenue are visible some of the farmsteads which were central to the Battle of Gettysburg, including Rose, Trostle, Wentz, Sherfy, Spangler, Klinge and Codori. Because of the association of the area with an

agricultural landscape, also visible are a variety of fence types.

Nearly every attraction on Sickles Avenue has a wayside exhibit, some the wood-slat and impressed aluminum variety used by the Mission 66 campaign, and others the more recent colorful computer-produced images on brown metal posts, produced by the Harpers Ferry Design Center. Access to parking shows the same variety, from muddy curbs and gravel to asphalt-paved pull-outs.

Significant Features: Sickles Avenue passes through and near several of the most dramatic scenes of fighting from the Battle of Gettysburg, particularly Devil's Den, The Wheatfield, the Loop, the Peach Orchard, and Excelsior Field.

40. Slocum Avenue

Material: Telford base with a bituminous macadam/asphalt surface. The sections reconstructed by the CCC have a macadam base.

Length: (6373') [1.308 miles]

Width: (16') [24'] 17'-18' except where realigned the width is 20'

Location: Slocum Avenue is located in the Culp's Hill section of the park within a sector bounded by the Baltimore Pike and Hanover Road. The avenue runs from Spangler's Spring at the junction of East Confederate and Colgrove Avenue, winds its way up towards and onto Culp's Hill, passes along the base of East Cemetery Hill, then exits onto Baltimore Pike.

Brief History: The GBMA named Slocum Avenue on 4 November 1887 for Major General Henry Slocum, but an avenue for this location had been proposed as early as 27 July 1882. The original avenue ran from East Cemetery Hill, by Culp's Hill, to the Baltimore Turnpike near Slocum's Headquarters, and came out from the Spangler Spring area along the present route of Colgrove Avenue. The commission Telfordized Slocum Avenue in 1896, but only as far as a cul-de-sac at Spangler Spring. The sharp curve east of the Culp's Hill tower received constant damage from motorists not slowing down enough for the turn. To alleviate the continual problem, in 1920 the commission widened the curve and added extra screenings and a coat of Tarvia to create a more durable roadbed. The NPS significantly altered the avenue's alignment around

Culp's Hill tower in 1934 as part of the Emergency Conservation Work (ECW) program.

Description: Slocum Avenue is characterized by curves up and down the rolling and rocky land around Culp's Hill, which saw such intense and convoluted fighting that it can be difficult to trace the tight movements of the two armies. Monuments line nearly the entire course, except for where the NPS altered the avenue's alignment. Sections of the avenue have significantly overgrown from the more open woodlots that the War Department maintained. Falling trees have damaged monuments ever since the monuments were erected, regardless of the care of the groves.

The avenue begins at the sparsely vegetated swale near Spangler's Spring. After passing the spring, Slocum veers up the hill to the right, through a boulder-covered slope and a preserved line of stone breastworks. The avenue is set off from the surrounding heavily wooded landscape by a varying-sized band of land consisting of mowed grass, monuments, and tall, mature trees which shade the route. Most of the monuments have been mounted on boulders, suggesting not only how impenetrable the land must have been for men trying to entrench on it during battle, but also the memory the boulders must have invoked for veterans when they returned to select the sites for their regimental monuments. The commission usually aligned the avenue around the boulders, except for one passage in this section of Slocum which still shows how it was etched through the rocks, the boulders planed flat for the roadbed. Shortly after this stretch of avenue the road curves sharply into a valley near Pardee Field to meet Geary Avenue, then swings up the other side of the valley through another rocky and monumented procession, this one slightly more open than the previous.

Just beyond the castle-like monument of the 150th New York Infantry the avenue makes an abrupt change, leaving little mystery about where the NPS reconstructed the avenue in the 1930s. Whereas the old avenue made yet another sharp curve in preparation for its advance up the right side of Culp's Hill, the new roadway cuts left around the hill. The avenue widens, the roadbase built up and banked with broad shoulders and superelevated curves to sweep automobiles up Culp's Hill, around the tower, and back down to meet the main part of the avenue again for a last sweep into the open ground near Stevens Knoll. Now the tower is a major focal point of the hill's summit, whereas in the past it was a feature along the route. The

realigned section of the road ends at the entrance to Williams Avenue, after which the avenue negotiates the topographical landscape features more intimately around Slocum's artillery fortifications and other remnants of the battle. At this point appears, as well, an uninterrupted view of East Cemetery Hill. Along the entire route approximately six gravel pull-outs accommodate vehicles, particularly in places with the most monuments and markers. More substantial parking is provided at Spangler's Spring and on Culp's Hill, where there is space for at least twenty vehicles.

One of the more unfortunate repercussions of the avenue's altered alignment is that several of the monuments are now left to fend for themselves in the woods and are nearly obscured from view. The statue of General Greene points and stares due southeast to some unknown point in the trees and dense underbrush. Until 1934, he pointed towards the Confederate troops across the avenue just below him. The old avenue has become an informal path for those who notice the monuments down the slope in the woods. The path is heavily eroded because nothing seems to have been done to make the ground secure for hiking.

Significant Features: The line of monuments mounted upon boulders and flanking the winding avenue are some of the most significant features of the avenue. The avenue used to have some of the most dramatic road construction and topography, particularly the retaining walls around Culp's Hill, where the curves were more like switchbacks to access several of the regimental monuments. Throughout major sections of the avenue, lines of earthworks thrown up by the soldiers are still visible, particularly to the east of the avenue. The largest one remaining intersects with Slocum Avenue at Stevens Knoll. At the parking area near Spangler's Spring a remnant of the War Department's metal hitching post stands at the parking lot's south end, an upright pipe-post still equipt to have a vertical pipe attached.

41. South Confederate Avenue
(Sections 5, 6, 7, & 8 of Confederate Avenue)

Material: Telford base with an asphalt surface; realigned sections have a macadam base.

Length: (12,477' or 8,777') [1.793 miles]

Width: (20') [20'] 20'

Location: South Confederate Avenue runs one way beginning at Emmitsburg Road and ending at the junction of Warren, Sykes and Wright Avenues, south of Little Round Top. It is the major route across the south-central section of the park.

Brief History: The commission acquired the land for South Confederate avenue in sections, and thus the avenue was also constructed at different times. For convenience in keeping a record of activities on the long avenue, the commission divided it and West Confederate into sections, with South Confederate covering sections five through eight. War Department records and even the iron avenue signs do not designate the avenues as "North," "South," "East," or "West." The avenues were simply labeled "Confederate Avenue." The commission opened and Telfordized the sections of the South Confederate Avenue at different times, depending upon when the commission received property rights. Section 5 (2470') piked November 1894 - February 1895; Section 6 (1840') piked May - September 1895; Section 7 (2850') piked May - September 1895; Section 8 (1617') piked July - October 1897.

When the NPS decided to realign the avenue in the 1930s its main concern was for the needs of the automobile, not the landmarks and troop positions that the War Department's avenue explored. Elephant Rock and a stone wall near Bushman's Woods, for example, served as the terminus and guide for one of the first sharp curves depicted in Cope's plans for Section 6 of the avenue. The commission rebuilt 1650' of these stonewall defenses by 1902.²²⁶ The rock is now distant from the avenue, no longer defining the curve. Shortly after the Plum Run crossing Cope labeled a long line of Confederate defenses as a significant landscape feature in determining the route of the avenue. The changes made to the avenue transformed South Confederate into the most representative of NPS roadway design, with the road slightly elevated above the road grade, sodded and slopes roadsides, paved pullouts, and superelevated serpentine curves. Only a few points remained unchanged in the alteration plans, including most of the straight stretch south of Emmitsburg Road and two points where the new avenue happened to meet the old directly south of the Slyder Farm

²²⁶ Cope, Avenue Log, 57, GNMP - Archives.

and near the east intersection with Wright, Sykes, Warren
Avenues.²²⁷

Significant Features: South Confederate avenue now represents more of a NPS road than a War Department road. The bridge that the CCC constructed over Plum Run is now one of the largest bridges in the park. The old War Department bridge was removed as part of the avenue realignment plans. An adventurous hiker can still trace the old route of the avenue, which is particularly easy to follow once east of Plum Run.

42. Stone Avenue

Material: Telford base with asphalt surface.

Length: (900') [0.501 miles, Meredith and Stone] Stone only, 0.2 mile

Width: (16') [18'] 20.5'

Location: Stone is a one-way avenue entered from the Chambersburg Pike. After passing the McPherson barn and the northern border of Herbst's and McPherson's Woods, Stone turns into Meredith Avenue. The avenue is associated with the first day of fighting and marks the north-south position of Stone's Brigade on McPherson Ridge.

Brief History: The commission acquired the lands for the avenue from the GBMA in February 1896. It remained a "poor earth road" until late 1904. The NPS realigned and regraded the south end of the avenue near its curved juncture with Meredith in the 1930s, to accommodate automobile traffic.

Description: Stone and Meredith Avenues combine a pastoral landscape and mature woodlots, and are both accentuated with monuments and markers as a reminder of the first day of the battle. The avenue provides access to the old NPS entrance station, built by the CCC. Material traces of the CCC also appear in the rustic guard rail next to the lily-pond on the east side of the avenue. At this point, as well, worm fences demark the east side of the avenue. To the right, across from the pond, a fenced pasture slopes downward to the west, suggesting the

²²⁷ Bureau of Public Roads, Project 3A3, Flat File Drawer MC7
DR E, Folder 3 of 13, GNMP - Archives.

significance of the elevated ridge to the Federal Troops as they first encountered the Army of Northern Virginia. Immediately after this, however, rather than a curve which follows the topography and the lines of defense, as the commission intended, the avenue now has a grand curve typical of other National Parks. As one approaches the line of woods, it is still apparent, even after sixty years, that the avenue went straight and then made a sharp turn, rather than the gradual approach the road takes today. On Meredith Avenue, in particular, the monuments no longer seem to fit the landscape. They are perched for the convenience of the road instead of showing anything significant about the regiments' positions.

Recent roadwork on Stone Avenue has removed most of the gravel pull-outs which used to predominate. Now pavement markings and "Park on the Right Side of the Pavement Only" signs instruct drivers in the new rules of parking etiquette. Tall yellow posts appear around the curve here and in other sections of the park to prevent vehicles from pulling onto the soft shoulder.

Significant Features: Fences line both sides of the avenue, an unusual feature in the park today. The CCC-constructed entrance station serves as a reminder of the kinds of changes that the NPS made in the park in its early years, particularly in creating architecture and road features which blended with the environment. The John Burns statue and the McPherson Barn are two of the main attractions of the avenue.

43. Sykes Avenue

Material: Telford-based covered with asphalt surface. Realigned sections have a macadam base.

Length: (2997') [0.138 mile]

Width: (20') [20'] 19'

Location: This north-south oriented road connects South Confederate Avenue from the south to the Wheatfield Road to the north.

Brief History: In its current configuration, Sykes Avenue runs a direct line over Little Round Top, out of view of the overlook made famous by General Warren, where he observed the positions of the opposing armies and ordering men to fill the Union line. It is difficult to determine from maps of the GBMA period if the

avenue actually looked out over the viewshed to the west, but the War Department aligned Sykes Avenue in 1897 to make two appearances onto the summit of Little Round Top. It first appeared north of the Twelfth and Forty-fourth New York monument, curved towards the east and disappeared behind a line of trees, then reappeared again north of the Warren Statue, and curved back sharply into the woods on a section of the avenue supported by a retaining wall. The precariousness of the approaches required that the commission construct 216' of retaining walls to support the roadway. These walls and a few other sections on the summit also received 292' of pipe railings as an added precaution for carriages and pedestrians. These same pipes would have seemed woefully inadequate for automobiles negotiating the curves, although there is no record of anyone driving over the retaining walls.

In 1934 the NPS declared the curves dangerous for automobiles and removed all traffic from Little Round Top. They redirected traffic behind the summit, at the same time constructing parking for tourists who then had to park their vehicles and walk to the overlook and the paved walkways. The Telford base of the original avenue now creates a solid path into the woods at the intersection of the Wheatfield Road, and Sykes and Sedgwick Avenues. The NPS altered the grade as well as the alignment and now a solid line of the 8" stones has appeared due to erosion in the southeast portion of the intersection.

Significant Features: Little Round Top has become one of the most heavily visited sites at Gettysburg. In terms of avenue landmarks, the traces of the old avenue alignment are tricky features to find, but worthwhile to follow. Warren's statue continues to be a famous attraction one expects to find on Little Round Top, but recently his story has faded in favor of Chamberlain's fight to hold the hill. Ironically, an iron sign attached to the boulder where Warren stands claims that his deeds do not require repeating, that no one would or could forget him.

44 United States Avenue

Material: Telford base with an asphalt surface.

Length: (4150') [0.781 mile]

Width: (20') [36'] 18' to 18.5'

Location: United States Avenue runs one-way from Emmitsburg Road through the central section of the battlefield. It ends at a "T" where it meets Sedgwick Avenue from the south and Hancock Avenue heading north.

Brief History: In the GBMA minutes for June 1887 is the first mention of surveying the land of the Trostle Heirs to open an avenue along what is now United States Avenue. The commission received the land, for some reason, from the Quartermaster Department rather than from the Memorial Association. The commission Telfordized the avenue in 1895, one of its earliest avenue accomplishments. The avenue became the first good carriage surface east and west across the battlefield, opening here-to-fore inaccessible sites. Laborers constructed the base of the avenue using stone from the nearby Trostle farm. A part of Emmor B. Cope's records of the avenue's expenses included \$396.70 to Jacob Solt from 9 January to 24 June 1900 for "filling Quarry hole."²²⁸

45. Wadsworth Avenue

Material: Telford base with an asphalt surface.

Length: (925') [Wadsworth and Doubleday 0.546 mile] Wadsworth only, 0.2 mile

Width: (20') [18'] 19'

Location: Wadsworth Avenue is a short two-way avenue in the first day's battlefield which serves as a connector between Doubleday, Reynolds, and Buford Avenues.

Brief History: According to a map prepared by a Massachusetts Granite Company, a road existed by 1887 along the route now covered by Wadsworth Avenue.²²⁹ The Gettysburg Park Commission Telfordized and named the avenue in 1899. In commission photographs of the completed avenue published in the Annual Report that same year, a farmhouse and its surrounding buildings, trees, and fences appear at the intersection with Reynolds

²²⁸ Cope, Avenue Log, 67, GNMP - Archives.

²²⁹ "Gettysburg Battleground," map for Smith Granite Company of Boston, MA, 1887, Nicholson's personal bound volume of maps, GNMP - Archives.

Avenue. The farm was removed in the 1930s because it obstructed the vista from the Peace Light Memorial.

Description: Wadsworth Avenue is a relatively straight road which follows the rise and fall between Oak Hill and the ridge of Reynolds Avenue, with the vestiges of a small run in the valley between the two higher points. At the junction of Reynolds and Buford Avenues, near the foot of a small, inviting shade tree, the avenue heads southeast and quickly dips from the higher elevation and more open landscape of the intersection and crosses a culvert over a stretch of low marshy land before merging into Doubleday Avenue. After passing a scrubby growth of trees and shrubs which divides two sections of fields and marks the line of a horse trail, Wadsworth displays the characteristics of a pleasant, partially tree-covered suburban road. Whereas much of the park is forested with various typed of deciduous trees, this section of Wadsworth is dominated by tall oaks and a few conifers.

Significant Features: Unlike nearly every other road in the park, Wadsworth contains only one small marker. At the intersection of Reynolds and Buford a cement pallet remains from the land's days as an active farmstead. It appears to be the cover to a well.

46. Wainwright Avenue

Material: Macadam base with an asphalt surface.

Length: (1300') [0.356 mile]

Width: (16') [12'] 10'

Location: Wainwright Avenue parallels the Baltimore Pike in the Culp's Hill section of the park. It begins at Slocum Avenue and runs one-way towards the north-west along the base of East Cemetery Hill.

Brief History: The avenue is part of a historic trace which pre-dates the Civil War. The old Shippensburg-Baltimore Road was established around 1769 and traversed along the east slope of Cemetery Hill, along the route now followed by Wainwright Avenue. The construction of the Gettysburg and Petersburg Turnpike in 1807 followed more closely the route of the present day Baltimore Turnpike (Route 97), and thus abandoned the other old section of

road, but left a roadbed.²³⁰ The commission did not macadamize the avenue until 1910, announcing the completion of the project in the Annual Report for 1911. The Lafayette fence and gate which now surrounds the Soldiers' National Cemetery used to surround East Cemetery Hill, with a set of gates opening onto the south entrance of Wainwright Avenue. The NPS removed the fence in the 1930s, significantly altering the commission's intentions that the hill be viewed as a gated formal landscape.

Description: To look at Wainwright Avenue and its surrounding landscape today gives park visitors a glimpse at the park landscape under the authority of the War Department. Except for the removal of the Lafayette fence, the avenue has been spared some of the alterations which have transformed other avenues into a blend of War Department and modern NPS roads. As a straight road, which does not get heavy travel, it has never become a focus of attention for safety or aesthetic alterations. The alignment of the avenue, with its slight jig to the east, as well as four stone walls running down the Cemetery Hill perpendicular to the avenue, are all residual features of the road's pre-battle days. Today the park has left the fields as open meadows, but mows along either side of the walls in addition to the edges of the avenue.

As one approaches Wainwright Avenue coming off one of the final bends of Slocum Avenue, a valley of hayfields and hedgerows opens to the left, leading to a woodlot at the base of the hill. The stone walls on Cemetery Hill, unlike other sections of the park that were also agricultural at the time of the battle, are reminders of the smaller scale of agriculture which sustained the regions' farmers. To the left of the avenue a stake and rider fence hugs the pavement edge, turning westward towards and encompassing Menchy's Spring, a water source during the battle. The significance of the site to the Battle of Gettysburg is emphasized through a proliferation of monuments along the avenue and across the slope and hill above, including two equestrian bronze statues of generals surveying the landscape. Also clearly visible, however, is the thick, sky-blue, silo-shaped water tower, standing in the general vicinity of the previous structure which houses the painting in Zeigler's Grove.

²³⁰ Christ, "Building a Battle Site: Roads to and through Gettysburg," 47, 58.

Two-thirds of the way along the avenue the commission constructed a retaining wall, separating the old roadway/avenue from the now overgrown entrance to and pasture which extended eastward below. The Gettysburg granite wall, topped with dressed stone, survives surprisingly intact, except that sections of the gas-pipe railing have disappeared from the northern end. At the end of the wall the avenue ceases to lead visitors through a parkscape, entering, instead, a zone of recently constructed houses up the slope to the left the ever-expanding elementary and middle school and its surrounding grounds to the right.

Significant Features: Wainwright Avenue is the only trace of old active public roadway owned by the park today. The retaining wall at the northern edge of the avenue is one of the few retaining walls constructed by the commission that survives. The rest were removed when the NPS realigned the avenues. The dressed granite that tops the wall measures 18" wide, 7' deep, and range in length from 2'-5" to 5'-5".

47. Warren Avenue

Material: Telford base with an asphalt surface.

Length: (1550') [0.295 mile]

Width: (16') [20'] 16.5' at eastern section past series of rocks, widening to 18' through the valley.

Location: Warren Avenue intersects South Confederate, Sykes, and Wright Avenues at its eastern end, and Crawford and Sickles Avenues at its western end. The avenue provides two-way access between the Round Tops.

Brief History: A trace of what later became Warren Avenue first appears in 1887 on a map of Gettysburg advertising the Smith Granite Company, of Boston, Massachusetts. The avenue connected to the avenue which crossed Little Round Top, but did not connect to any approaches from the east. In 1899, E. B. Cope illustrated Warren as a "poor earth road," at this time also showing an equally unimproved road providing access between Warren and Taneytown Road via Wright Avenue. When the commission piked the avenue in 1902, it gave tourists smooth access to popular points of interest like Little Round Top, the Valley of Death, and

Devil's Den.²³¹ The NPS slightly modified the east end of the avenue when reconstructing the intersection of South Confederate, Wright, Sykes and Warren Avenues, most notably shifting the grade slightly south and widening the overall intersection.

Description: The tight confines of Warren Avenue between boulders and the rocky southern slope of Little Round Top have meant that the avenue alignment looks much the same now as it did when improved by the War Department. If driving from the east, the avenue begins at the shady intersection of four roads between the two Round Tops, then gradually descends into the Valley of Death. The NPS has begun a pruning and thinning project around and across Little Round Top, so Warren Avenue to the right is open to rocks and a scattered growth of trees, gradually opening at the far end to the rocky meadow area surrounding Plum Run. A crowded grove of small trees and undergrowth flanks the right side of the avenue nearly two-thirds of way into the valley, then opens to allow a view of Devil's Den. The avenue ends at a "T" facing scattered monuments and artillery across a boulder-strewn slope which leads to a low ridge of trees. Two paved parking areas and one gravel pull-out near the east end of the avenue provide parking for those who want to explore the area on foot. Few people seem to notice them, however, before heading up Sykes Avenue to Little Round Top. Instead they park every which way on Sykes Avenue's shoulder for closer access to the featured view.

Significant Features: The War Department bridge over Plum Run remains largely unmodified from its original form, except that the oak plank floor has been replaced with metal beams and an asphalt surface. A trace of the Gettysburg Electric Railway crosses the avenue, looking more like a park maintenance access road to the nearby toilet facilities than a railway bed.

48. Webb Avenue

Material: Telford base, now a grass-covered pedestrian area.

Length: (Combined with Harrow Avenue, the two loops were 1470')

Width: (20')

²³¹ "Gettysburg Battleground," map for Smith Granite Company, GNMP - Archives; Cope, "Map Showing Avenues, Pikes and Roads on Battlefield of Gettysburg."

Location: Webb Avenue provided an avenue entrance to the Bloody Angle and the advanced positions of the Union Army. The avenue extended on and off the west side of Hancock Avenue in a horseshoe arch, north of the Copse of Trees.

Brief History: Webb Avenue was Telfordized in 1895-96, at the same time as Hancock Avenue. The Avenue was removed in 1994 during recent roadwork in the park along Hancock Avenue.

Description: From the tip of the Webb Avenue loop one commands an uninterrupted view west towards Seminary Ridge, taking in fields, farms, fences, and the Emmitsburg Road. Webb Avenue's old route remains indelible in its loop to and from the stone wall marking the "Bloody Angle" and "High Water Mark of the Rebellion," where Armistad fell, and other places that grip the imagination of modern visitors to Gettysburg. Grass has been unable to get a good hold on the ground due to the solid Telford base, heavy foot traffic, dry weather, and whatever method of reseeding may have been used on the site.

When visited on a busy summer day, the area around old Webb Avenue is overrun with a confusion of buses, cars, people, tour guides, bollards, monuments, signs, markers, and the material culture of war. Several sets of artillery and caisson supply carts carrying ammunition fill the space Webb Avenue used to encircle and two freshly positioned wayside exhibits block the old northern entrance. With all this concentration of activity, the "Bloody Angle" actually looks more interesting and imposing when viewed on foot approached from the west, particularly when tourists perch themselves upon the stone wall, awaiting your arrival. The confusion from a distance seems to give the imagination more information to learn from than overloading the senses by being jostled by the crowds and the multi-levels of interpretation.

Significant Features: Besides the events which took place near Webb Avenue, the varied interpretations and commemorative objects of the events which took place make it significant in and of itself.

49. West Confederate Avenue

Material: Telford base with asphalt surface.

Length: (10,470' from Hagerstown Road to the Millerstown Road/
3700' from Hagerstown to Emmitsburg Road) [2.750 miles includes

Gettysburg National Military Park Tour Roads
HAER No. PA-485
(Page 207)

Seminary Avenue section] From Hagerstown Road to Emmitsburg Road only, 2.8 miles

Width: (20') [20'] width ranges from 19'-5" to 21'

Location: West Confederate Avenue corners the longest stretch of road in the Gettysburg National Military Park. Entirely within the park, the road follows the north-south Seminary Ridge one-way from a traffic light on the Hagerstown Road, flows up and down a series of gentle slopes, crosses the Millerstown Road, and then meets the Emmitsburg Road at an angle, just about South Cavalry Field. Across the road begins South Confederate Avenue.

Brief History: An avenue along this route was first proposed by the GBMA on 25 February 1887, from the Hagerstown Road to the Emmitsburg Road. The avenue was not actually opened until the Battlefield Commission took over the battlefield, and even then the laborious process of obtaining road right-of-ways and constructing the avenue took years. The northern and southernmost sections were Telfordized in 1895, the remaining sections from December 1900 until August 1901. The NPS removed one of the War Department culvert bridges in the 1930s.

50. Wheatfield Road/Avenue

Material: Telford base, recently repaved with asphalt.

Length: (1100') [1.491 miles]

Width: (20') [25'] 19'-20'

Location: Wheatfield Road runs east and west between Emmitsburg and Taneytown Roads south of the borough of Gettysburg.

Brief History: In 1899, the commission Telford piked 1100' of the Wheatfield Road to create a quality connection between the two sections of Sickles Avenue. The road was ceded by the state to the federal government in 1895.

51. Williams Avenue

Material: Macadam-based roadway repaved with bituminous asphalt.

Length: (1625' and 578' Brick Yard Lane) [0.303 mile]

Width: (12') [12'] 10'

Location: This narrow avenue runs one way east to west as a connector between two sections of Slocum Avenue along the base of Culp's Hill, exiting east of Stevens Knoll.

Brief History: The avenue was graded and piked in two sections in 1915, the first along the south foot of Culp's Hill, and the second encompassing what had been known as Brick Yard Lane. In 1914 the commission initially named the one of the proposed sections Williams Avenue and intended to rename the second section, but the whole has come to be known as Williams Avenue. The road was named for Brevet Major General A. S. Williams, commanding the Twelfth Corps. Before the realignment of Slocum Avenue, Williams Avenue was used as an alternate route for any vehicles that could not negotiate the sharp turns and steep grade on Culp's Hill.²³²

Description: Williams Avenue is a lightly traveled route. While the official tour route, sudden proliferation of monuments, and the wider breadth of Slocum Avenue seem to lure drivers to the right, Williams Avenue leads inconspicuously to the left. Within a matter of yards the avenue disappears into the woods, where the trees touch overhead and the road shoulder is narrow with grassy bands that go up to the edge of the pavement. After a sharp curve to the left and a dip into a slight valley, the mowed edge widens just before the avenue veers right into view of the open grassy Stevens Knoll and intersects with Slocum Avenue. The visual experience of this small avenue has been severely compromised by the construction in the summer of 1998 of a tall cyclone fence within view of the avenue. The fence is within the official park boundary, but is not on park property. The property owner cut a wide swath of trees to open the land for this fence, which affects the views along both Williams and Geary Avenues.

²³² There is some conflicting information on when Williams Avenue came into existence or when it was improved. The 1915 information comes from the Annual Report, and Cope's Avenue Log, yet the Gettysburg Military Park map from 1903 labels the Williams Avenue as a Telford avenue. Also, Cope's Avenue Log for Slocum Avenue labels an "old road" at points where Williams Road now enters and exits, but it is unclear if that was for the old GBMA alignment and/or some other road.

Significant Features: The most significant feature of this road is that it links two distinct sections of Culp's Hill. It retains its early stone fence lines which trace early and present property ownership. A pair of CCC-era arched culverts with square openings and deep wells flank the avenue entrance off Taneytown Road.

52. Wright Avenue

Material: Telford base with asphalt surface.

Length: (3000') [0.730 mile with Howe] Wright only, 0.55 mile

Width: (16') [18'] 14.5'

Location: Wright Avenue is the first avenue that one encounters when heading north on Taneytown Road. It provides access to the central avenues of the park, leading between the Round Tops.

Brief History: The GBMA mention making a survey for Wright Avenue in April 1887, but this did not include the entire avenue. The avenue was improved beyond the J. Plank Farm Lane, and although the GBMA owned the right of way beyond that point, left the avenue undeveloped. The commission substantially improved the avenue in 1903.

Significant Features: Traces of the more formal way of building stone walls survive on the south side of the avenue, as one approaches the first curve from the east.

53. Small Roadways:

Virginia Monument: A macadam roadway graded and piked around the memorial in 1917.

Lincoln Drive Avenue: A 205' macadam roadway graded and piked around the Lincoln Memorial in 1909.

Reynolds Branch Avenue: A 492' long, 10' wide branch avenue constructed through Reynolds Woods.

Sedgwick Drive: 500' long, 16' wide

Appendix C:

Local Roads:

A commonly hailed reason for the Battle of Gettysburg taking place is the network of ten roads which radiate to and from the borough. The original laying out of these roads took place over many years and had been no easy task, often requiring condemnation proceedings across the land of reluctant farmers. Local Roads Papers, housed in the Adams County Court House, document the growth of these roads and their gradual evolution and outreach throughout the valley and across the neighboring ridge lands. Roads always took their names from the destination community. The local community, Gettysburg National Military Park and the local tourist industry depend upon these roads as the primary transportation network, especially now that passenger train service has long been unavailable as a travel option.

1. Local Name: Baltimore Pike
Other Name: Route 97
2. Local Name: Carlisle Road
Other Name: Route 34
3. Local Name: Chambersburg Pike
Other Name: Route 30
4. Local Name: Hagerstown Road
Other Name: Route 116
5. Local Name: Hanover Road
Other Name: Route 116
6. Local Name: Harrisburg Road
Other Name: Business Route 15
7. Local Name: Emmitsburg Road
Other Names: Business Route 15, Steinwehr Avenue (from the intersection of Baltimore Pike to the park boundary, just south of where West Confederate Avenue crosses the Emmitsburg Road and becomes South Confederate)
The posted speed is 25 m.p.h. until after leaving the official park boundary, but the smooth, open road tempts most drivers to exceed it, especially when leaving Gettysburg. Much of the commercial development associated

with the National Park in Gettysburg has taken place along the route.

8. Local Name: Mummasburg Road
9. Local Name: Taneytown Road
Other Name: Route 134
Brief History: A 2443' portion of the road was reconstructed in 1905 on the Telford System with a width of 16'.
10. Local Name: York Pike
Other Names: Philadelphia Pike, Route 30

Granite Schoolhouse Lane
Millerstown Road
Old Shippensburg Road
Wheatfield Road

Appendix D:

Farm Lanes:

The 150,000 Union and Confederate soldiers who descended upon the valley found a rich source of supplies and dozens of farms, many of which had been established since the late 1700s. The network of farms had their own interlacing road system, connecting friends and relatives to neighboring farms and communities and to the local roads and larger network of farm markets. These lanes became natural inroads for the troops across farmland and several played significant roles in the battle. Today the lanes leading off the main roads and the GNMP Avenues play a visual role for visitors who seek to understand the appearance of the Civil War period landscape. The lanes and their accompanying farmsteads reinforce for visitors the rural character of Gettysburg and remind visitors that many families found themselves immeshed in three days of fighting, some never to recover. Unlike the Avenues, which were a creation of the War Department to make the battlefields available to veterans and the growing number of tourists, the lanes reflect a pre-existing road system. Some of the lanes, however, altered their alignments when the Federal Government purchased land to build the Avenues.

Bushman Farm Lane
Granite Farm Lane
McClellan Farm Lane
Rose Farm Lane
Spangler Farm Lane
Troost Farm Lane
George Weikert Farm Lane
John Weikert Farm Lane

Types of fences:

agricultural
post and rail
stone
slab thing
Virginia worm
stone and rider
barbed wire
iron
locust post and gas pipe
cement and gas pipe

Gettysburg National Military Park Tour Roads
HAER No. PA-485
(Page 213)

gates
cyclone
slat board
white picket

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FOR FURTHER INFORMATION:

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ADDENDUM TO:
GETTYSBURG NATIONAL MILITARY PARK TOUR ROADS
Gettysburg National Military Park
Gettysburg vicinity
Adams County
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